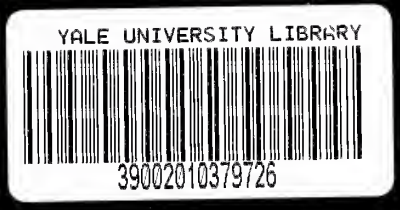

An Appraisal of Hong Kong's Public Hospital System in 2001

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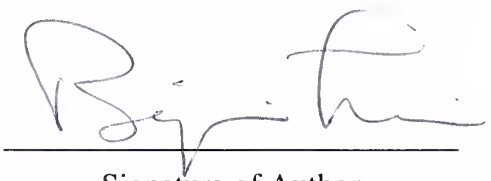

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FOREWORD

This essay expands the work completed in spring of 1998 for my Master of Public Health thesis entitled "An Appraisal of Hong Kong's Public Hospital System." A considerable body of new literature, including the controversial report produced in 1999 by the Harvard University Consultancy Team entitled "Improving Hong Kong's Health Care Systems: Why and For Whom?", along with new data inspired my reexamining the original conclusions of my 1998 thesis. In particular, the "Harvard Report" generated a great deal of healthy discussions and debate on how the Hong Kong health care system ought to proceed forward. While its thesis remains the same, "An Appraisal of Hong Kong's Public Hospital System in 2001" is considerably enriched and its analyses expanded.

ABSTRACT

AN APPRAISAL OF HONG KONG'S PUBLIC HOSPITAL SYSTEM IN 2001.
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The Hong Kong Government established the Hospital Authority (HA) in 1990 to manage all public hospitals in Hong Kong. In so doing, the Government had followed the chief recommendations of the 1985 Scott Report to separate hospital care from primary care, and to establish a statutory body independent of the civil service structure but accountable to the Government to oversee this new public hospital system. This essay examines this important transformation in Hong Kong's public hospital system. It first provides the background and history of this public hospital system. It then examines the system's problems which had led to the Scott Report's recommendations and the subsequent creation of the Hospital Authority, and delineates the HA's objectives. Next, using multiple sources of available evidence, this essay assesses the Hospital Authority's degree of success/failure in meeting its objectives and addressing the system's problems.

This essay found that while the Hospital Authority appeared to have met some of its objectives, it has not met or only partially met some of its other objectives. Moreover, new problems have arisen from the creation of the Hospital Authority, namely 1) the vertical division between management personnel from the Head Office above and clinical personnel from the hospitals below, and 2) the further fragmentation of the public healthcare delivery structure by separating hospital care from primary care. The essay concluded, therefore, that the present management transformations embodied in the creation of the Hospital Authority could not alone solve many of the problems in Hong Kong's public hospital system. In light of this assessment, this essay gives a set of recommendations for improving Hong Kong's public hospital system.

ACKNOWLEDGMENTS

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I. INTRODUCTION

A. General overview of history and characteristics of Hong Kong

Hong Kong has recently undergone an historical transition. On July 1st, 1997, Hong Kong officially reverted back to Mainland Chinese rule as a Special Administrative Region (SAR) for 50 years. Two unequal treaties in the 19th century created the British colony of Hong Kong. The first occurred in 1842 when Britain defeated China in the First Opium War. Hong Kong Island and the Kowloon Peninsula were ceded to Britain in perpetuity then. These areas are now the heart of Hong Kong's commercial activities and the most densely populated. In some areas, the population density stands over 100,000 persons per Km^2. The rest of today's Hong Kong, including the New Territories and the surrounding islands (which number 235, excluding Hong Kong Island), was "leased" to Britain for 99 years in 1898 in another unequal treaty, hence 1997 became the year of transfer. The New Territories used to be primarily rural, growing enough vegetables, for instance, to supply the entire Hong Kong population. Presently, however, with Hong Kong's growing population and urban migration into the New Territories, so-called satellite cities have sprung up while farming continues its decline. Hong Kong is now completely dependent on daily food supplies from Mainland China. Hong Kong's 413 square miles (1,070 sq. km) now supports a population of close to 7 million. Located on the southern coast of mainland China, Hong Kong borders the Province of Guangdong. The people of Hong Kong have mixed feelings toward the changeover. While many rejoice at this symbol of national pride and reunification, and an end to western colonialism, many also fear the political and economic uncertainties that lie ahead.

B. POPULATION AND VITAL STATISTICS

Hong Kong's population in 2001 totaled approximately 6,732,000. The population pyramid (Fig. 1A) indicates a developed society with its birth rates under control. The interesting bulge in the age groups 30-49 years old likely represents the birth cohorts from the exodus of Chinese from mainland into Hong Kong during the civil war and the Chinese communist revolution (1945-1949). Using 1994 and 2001 as the reference populations, the younger population (<20 years of age) displays a downward trend, while the older population (≥65 years of age) displays an upward trend (Fig. 1B).

According to the 2001 Population, Hong Kong's population numbered 6,732,100 as of March, 2001, of whom approximately 95% were Chinese. 89.2% of this population listed Cantonese as their usual language, 0.9% Putonghua (Mandarin), 5.5% Other Chinese Dialects, and 3.2% English. There were several interesting things of note about Hong Kong's population statistics. Between mid-1995 and mid-1996, natural increase accounted for only 23% of Hong Kong's population growth. The rest was mostly due to the net inflow of immigrants over the outflow of emigrants. To a large extent, this process of migration had been driven in recent years by the uncertainties surrounding the 1997 changeover when Hong Kong would revert back to Mainland Chinese rule. Of the net inflow of some 119,300 persons during the same period, over half (or approximately 60,000, ~1% of total Hong Kong population) were from Mainland China. This process of net immigration as the main fuel for population growth continued, as Hong Kong's rate of natural increase further decreased from 6.1 in 1995 to 3.0 in 2000 (Table 1C) while its population maintained an annual growth rate of 0.9%.

Moreover, a significant portion of Hong Kong's residents is highly mobile and often is away from Hong Kong. At the 2001 Census reference moment, of the 6.7 million Hong Kong residents, approximately 6.35 million were present in Hong Kong while 0.35 million (~5% of total Hong Kong pop.) were temporarily away from Hong Kong, of

whom about 60% were away in mainland China or Macau. The mobility of Hong Kong's residents appeared to have increased since 1996 as only about 3% of its population was away from Hong Kong at the 1996 by-census reference moment. The reintegration of Hong Kong with Mainland China in 1997 and the continuing increase of trade and other economic activities between Hong Kong and Mainland likely explained this trend.

Hong Kong (HK) has a very low Infant Mortality Rate (Table 1C), an IMR lower than even that of the U.S (Table 1E). Moreover, it has been decreasing from 7.4/1000 in 1989 to 4.6/1000 in 1995 to2.9 in 2000. Although the General Fertility Rate is only 43.8/1000, far from the replacement level of ~71/1000, Hong Kong's population has been increasing steadily in the past decade, exhibiting an average annual growth rate of 1.8% during the period 1991-1996, and 0.9% over the period 1996-2001. This growth is attributed to the net inflow of migrants as mentioned before, most of whom come from Mainland China. Life expectancy is high, and exhibits an upward trend as well.

Overall, Hong Kong's population enjoys a high level of education and standard of living. The general educational level of Hong Kong has improved quite significantly over the past two decades. In 1984, only 53.9% of the population aged 15 or over had attained secondary education or above, compared with 63.8% in 1994 and 71.1% in 2001. Analyzed by sex, the proportion of males having attained secondary education or above in 1994 was 67.8%, as against 59.6% for females. Hong Kong's GDP per capita was HK$183,483 (~US$23,523) in 1999. The Hong Kong Government had some HK$444.4 billion in its reserves as of 2000. At an exchange rate of HK$7.8 to US$1.0, this was still a huge sum. Taken as a whole, Hong Kong is a rich society by any standards. Nevertheless, one must not forget that Hong Kong's tremendous wealth has not been shared equally. Over 600,000, or 10% of its total population, live below the poverty line, struggling and barely getting by. The rich in Hong Kong make up only 10% of the population, yet they hold 42% of the territory's gross income. The 50% at the lower end shares only 19%.

C. General overview of history of medical services in Hong Kong

Hong Kong's health services delivery system has undergone significant changes since World War II. These changes have been driven to a large extent by rapid population increases and economic developments. Prior to WWII, Hong Kong's population numbered only about one million. Government-sponsored social policy existed only minimally at the time. According to Brian Brewer, "...families were the primary source of welfare for most of the population with some services such as hospitals being funded by Chinese charitable organizations and clan associations" [5].

WWII and the Chinese Civil War (1949-1950) caused a large influx of refugees and migrants into Hong Kong. Between 1946 and 1953, this influx swelled the population by over one million. It was during this period that the Hong Kong Government began to take a more active role in social policy making and in providing health services. During these immediate post-war years, however, priorities in Government health services were in controlling and preventing communicable diseases, and in combating the high rates of maternal and infant mortality. The sudden explosion of population and general hardship in these post-war years had led to congestion and unsanitary living conditions, inadequate supply of safe water and poor nutrition [37]. As the Government struggled to meet its basic public health responsibilities, development of public hospitals and clinics was slow.

It would be the end of the 1950s when the Hong Kong Government could afford to begin moving from problem solving to forward planning in its provision of health services [15]. The decade of the 1960s saw the inception of modern Hong Kong Government health policy and the first comprehensive review of the Hong Kong health care system. As stated in the Annual Report of Hong Kong 1962, "...the policy of Government is to provide, directly or indirectly, low cost or free medical and personal health services to that large section of the community which is unable to seek medical

attention from other sources" [18]. In 1964, the Government published the first Medical White Paper, a comprehensive review of the Hong Kong health care system. A second Medical White Paper was published in 1974, and an outside consultancy review was published in 1985. "Each review consisted of discussions of past, present and future government objectives for the health system as they relate to the health status of the population. A plan for the next ten years was presented, along with projected increases in government health expenditures for new facilities" [4].

II. HONG KONG'S OLD PUBLIC HOSPITAL SYSTEM

A. The 1964 Medical White Paper

The writing of the 1964 Medical White Paper was aided by Hong Kong's first population census conducted in 1961 (resident population = 3,129,648), which "...provided for the first time more social and demographic data for medical and health planning purposes" [14]. In reference to health care costs in the private sector, it was estimated in the 1964 White Paper that "...unsubsidized general outpatient medical care is not economically feasible for 50 per cent of the population, and that for inpatient treatment this figure rises to a minimum of 80 per cent" [18]. The following primary areas of concern, which were to guide the Government's health services planning in the next ten years, were also stated in the 1964 White Paper:

> (i) Outpatient clinics and other health services to prevent communicable diseases must be maintained.
>
> (ii) The health of the child population should be maintained at the highest possible level through maternal and childcare.
>
> (iii) Tuberculosis is the major community health problem requiring expanded clinic and hospital facilities.
>
> (iv) There is a serious shortage of general hospital beds.
>
> (v) There is a growing shortage of mental hospital beds [4, 18].

While public health concerns such as controlling communicable diseases and improving maternal and child health remained the priorities during this time period, it was clear from the 1964 White Paper that the Hong Kong Government was beginning to take on a greater role in providing hospital services. This was a departure from the Government's previous health policy which emphasized primarily public health services. This new policy, coupled with the Government's stated objective to provide practically free health care to that large segment of the population which could not afford it otherwise, started

Hong Kong on the path toward a socialized health care system with the private health care sector playing a distinctly complementary role.

It must be noted, however, that the move toward a socialized health care system was not inconsistent with Hong Kong's public policies emphasizing economic development. The following rationale was excerpted by Wong Cheong Wing from the same 1964 White Paper:

> In Hong Kong, where admissions to hospital are for the most part governed by urgent medical necessity and where the bonds of family and of local community (the basic factors in an agrarian economy) are being subjected to increasing strain by a rapidly-expanding and highly industrialized society, the economic loss due to sickness or disability, both to the individual and to the community, should not be underestimated.
>
> A good general standard of health throughout a community is an economic asset to it and helps to condition the levels of energy and initiative which determine productivity, particularly in a free enterprise economy such as Hong Kong [18]

In justifying the Government's provision of virtually free health care, the 1964 White Paper invoked the argument that a healthy free economy was dependent upon both a healthy, productive work force and the minimization of economic loss due to sickness and disability. Also consistent with the Government's economy-first policies, the report acknowledged that the implementation of its plan would be subjected to financial constraints and affected by competing concerns in other areas of development. From the very beginning, the development of Hong Kong's public health care system was characterized by financial prudence. This continues today, even though Hong Kong has become far more prosperous than in the 60's.

B. THE 1974 MEDICAL WHITE PAPER

By 1974, Hong Kong's resident population had grown to 4,319,600, an increase of 815,000 from the decade before [31]. As in the 1964 White Paper, the spirit of creating the capacity to provide virtually free health care to Hong Kong's growing population remained a focus of the 1974 Medical White Paper. It was also evident from the 1974 White Paper that curative hospital services were increasingly emphasized by Government health policies. No longer did the Government need to concentrate the majority of its efforts on public health services, as it had done in the years following WWII. As public health continued to improve, Hong Kong's IMR saw a dramatic decline from 26.4 per 1000 live births in 1964 to 16.8 in 1974. While the 1974 White Paper continued to call for the maintenance and improvement of public health services, the majority of the Paper's broad objectives and proposals pointed to the need to expand and improve existing hospital services. Some of these objectives and proposals were:

(i) build new hospitals and clinics to meet expected population growth

(ii) provide more specialist treatment for psychiatric cases and the elderly

(iii) build up medical and health services in the new towns and the New Territories

(iv) organize medical and health services on a regional basis

(v) relieve overcrowding in Government hospitals

(vi) secure greater use of beds in Government-assisted hospitals

(vii) bring together Government and Government-assisted hospitals in an integrated structure [31]

One can see that three new themes emerged from the Government's health policies as stated in the 1974 White Paper. One was the **regionalization of the public hospital system** to keep up with population growth and migration patterns. Population growth had exacerbated urban congestion in the already heavily settled areas of Hong Kong Island

and Kowloon Peninsula, and caused internal migration out to the New Territories, where so-called satellite towns were being developed. Another new theme was the **creation of an integrated structure to bring together Government and Government-assisted hospitals**, which were non-profit hospitals run by private charitable organizations and heavily subsidized by the Government. Government-assisted hospitals were also called subvented hospitals. At that time, there were no uniform fee structures and little integrated management between Government hospitals and Government-assisted hospitals. A third new theme was the **emphasis on improving services for selected needy segments of Hong Kong society**, such as the mentally ill and the elderly.

It is worthwhile to point out that the health policies laid out in the 1974 White Paper were consistent with the social service expansion in Hong Kong in the 1970's. As excerpted by Wong Cheong Wing in his paper, in the Hong Kong Governor's annual speech to the Legislative Council in 1973, the Governor spoke of the Government's policies to ensure:

> ...cheap subsidized housing for those least able to afford commercial rents, and the control of rents themselves; free medical education, and heavily subsidized secondary and tertiary education; social services and relief for the handicapped and destitute; and charges for medical care which are so subsidized as to be almost free [18].

Hong Kong's social policies had indeed come a long way from the 1940's, when Government-supported social services and programs were practically non-existent.

C. THE 1985 SCOTT REPORT

At the end of another ten-year period in 1984, the Hong Kong public health care system had reached the crossroads. While substantial progress had been made in the development of the Hong Kong public health care system, the system was showing signs of strain as well. By 1984, Hong Kong's population had reached 5,364,000, an increase of 1,044,400 from 1974. Moreover, an increasing majority of the population had grown to depend on this system of subsidized Government health care. This increased demand, coupled with rising community expectations for quality health care and a greater availability of advanced medical technologies, was pressuring the costs of providing subsidized health care upward and stretching Government health resources to the limit. Recognizing the urgency of the situation, the Hong Kong Government commissioned an Australian firm of management consultants, W.D. Scott Pty Co., to review the management of the existing public hospital system in 1985. It is unclear why the Government opted for an outside consultancy at this time as opposed to a review done locally as in the previous two White Papers. Some have suggested, as in a February 10 *Lancet* editorial, that it reflected internal divisions and "internecine warring" among health care leaders in Hong Kong [10].

Besides being the product of an outside consultant group, the 1985 Scott Report differed from the previous two White Papers in one important respect. Instead of reviewing the entire Hong Kong public health care system, the Scott Report focused on the management of public hospitals alone. As stated in the Scott Report:

> This report is concerned with... namely the provision of medical rather than public health services and facilities. It was perceived that the present medical service delivery problems could be largely separated from the public health scene, and that they were sufficiently pressing as to warrant particular attention at this time.
>
> In actual fact, the terms of reference... are even more specific, in that they relate to the delivery of medical services in hospitals... [31]

Although the two previous White Papers have shown the trend toward greater Government emphasis on hospital care, the Scott Report recommended to the Government the formal separation of hospital services from public health services. As will be discussed later on, this was in fact what happened.

i. State of Public Hospital System in 1985

At the time of the Scott Report review in 1985, the Hong Kong public health care system was run by the Medical and Health Department (MHD) under the Health and Welfare Branch, one of fourteen branches under the Government Secretariat, which was responsible for implementing all Government policies [6]. At this time, the Medical and Health Department oversaw both public health services and hospital services. Under the Medical and Health Department's direct management were 14 Government hospitals (not counting centers at Correctional Services Institutions), 73 other government institutions providing general outpatient and specialist services, and other services such as dental and family health care. These Government facilities were divided into five regions, each centered around a major acute hospital with 24-hour Accident & Emergency services termed a regional hospital. The regional hospitals were as follows:

Hong Kong Region - Queen Mary Hospital
East Kowloon Region - Queen Elizabeth Hospital
West Kowloon Region - Kwong Wah Hospital
New Territories West Region - Princess Margaret Hospital
New Territories East Region - Prince of Wales Hospital [31]

Although there were five regional hospitals, the East and West Kowloon regions were treated administratively as a single region, thus yielding only four formal regions. These regional hospitals were supported by one or more district hospitals, specialist clinics and general clinics. The district hospitals served a dual function. It referred patients in need of a higher level of care to the regional hospitals and received patients at later stages of treatment suitable for transfer from the regional hospitals [14]. In addition, there were 22 Government-assisted hospitals which formally reported to their independent Board of Directors, but were integrated to a limited extent into this regionalization scheme. Eleven private hospitals, all general hospitals, operated independently outside this Government regionalization scheme. As reference, as of 8/31/85, Government hospital beds made up 49.7% (12211) of the total number of hospital beds in Hong Kong, while Government-

assisted hospital beds and private hospital beds made up 39.2% (9624) and 11.1% (2722) respectively [31].

The Scott Report found that the Medical and Health Department had done a good job overall in implementing most of the policies set forth in the 1974 White Paper. These included:

> (i) continuation in public health improvement, controlling communicable diseases and improving maternal and child health, further lowering the IMR from 16.8 per 1000 live births in 1974 to 8.9 in 1984;
>
> (ii) maintaining a professional medical service provided at minimal expense to the majority of the community; and
>
> (iii) carrying out the regionalization scheme proposed in 1974 and building new hospitals and clinics [31].

Nevertheless, the Scott Report also recognized that the health care environment in Hong Kong had been undergoing significant changes which were portending trouble ahead should the public hospital system maintain its status quo. The Scott Report identified the following areas of concern.

ii. Areas of Concern

Rising Costs and Demand

Similar to situations in other developed countries, the costs of providing medical services in Hong Kong were rising rapidly due in large part to increased reliance on expensive technologies and rising community expectations for quality healthcare. Moreover, as the public hospital system continued to improve its quality while maintaining a virtually free fee structure, a greater portion of Hong Kong society had grown to rely on this public system for their care, thus generating increased demand. Nevertheless, since the Government appeared unlikely to change its tax structure and social spending policies in the near future, the proportion of government social spending on medical and health services would likely remain at approximately the same level. Government health resources would likely be stretched to the limit as it struggled to cope with rapidly rising costs and demand.

Rising Community Expectations

As the Hong Kong society continued to grow more prosperous and educated, what was once considered an acceptable level of health services no longer satisfied the populace. Patients were demanding better quality and access, and greater community involvement in the public health care system. For instance, although overcrowding in Government health facilities had long been a concern, it was no longer as well tolerated. Indeed, overcrowding in hospitals was a serious problem adversely affecting both patient satisfaction and the working environment for hospital staffs.

Schism Between Government and Government-Assisted Hospitals

Despite proposals set forth in the 1974 White Paper to better integrate the operation of Government and Government-assisted Hospitals, little had been achieved in this area. There was "...increasing disenchantment amongst the organisations receiving

subventions from Government for medical services, both in the level of fringe benefits granted to staff, and in the generally lower overall level of funding when compared with government hospitals" [31]. There was evidence of low morale among subvented hospitals employees, who enjoyed few or no fringe benefits for doing similar work as their counterparts in Government hospitals. Government hospital employees, in contrast, enjoyed the full range of Civil Service fringe benefits such as the government pension scheme, education allowances, housing loans and the home purchasing scheme. This caused an outflow of staff from subvented hospitals to Government hospitals, further hurting the operation of the subvented hospitals, some of which were already struggling with their finances. Some subvented hospitals were forced to charge higher fees to their patients. Some subvented hospitals were concerned with their survivability under the existing arrangement with the Government.

Problems in Hospital Management

Hong Kong has some of the largest hospitals in the world. As of 8/31/85, Castle Peak Hospital, a government mental hospital located in the New Territories West region, had 1,935 beds; Queen Elizabeth Hospital, a regional hospital for East Kowloon and East New Territories, had 1,938 beds; Queen Mary Hospital, a regional hospital for Hong Kong Island and the main teaching hospital for the University of Hong Kong School of Medicine, had 1,310 beds [31]. The sheer size of these hospitals and their heavy patient loads in and of themselves presented serious challenges to hospital management. Moreover, the Scott Report found that the existing hospital management structure was inadequate for managing these hospitals. The report pointed out the lack of clearly delineated leadership in the existing hospital management structure, where the Medical Superintendent was nominally responsible for heading government hospital administration but lacked the power to do so. Clinical consultants, physicians totally in charge of a unit ranging in size from 80 to over 200 beds, supervised the actual delivery

of clinical services and held great power in unit budgeting and the allocation of resources. Consultants were classified as D2 to D4 grade, whereas the Medical Superintendent was usually D1 grade and was thus below the consultant in status [31]. Consultants were appointed by the Medical and Health Department rather than the Medical Superintendent, who thus held no power over the Consultants' promotional prospects. Furthermore,

> Many consultants consider the Medical Superintendent to be a failed clinician, and thus hold little respect for him. It makes his role in adjudicating requests for resource allocation even more difficult. In a few hospitals, where the Medical Superintendent has higher medical qualifications, and has been or is a consultant, he is in a better position to allocate resources. [31]

In short, although Consultants were formally required to report directly to their Medical Superintendent, they rarely did so in reality and instead operated mostly independently. This lack of effective management leadership in government hospitals was identified as a major weakness in hospital management. The situation in subvented hospitals was similar.

Rising Professional Expectations

As mentioned previously, overcrowding in government hospitals was contributing to staff dissatisfaction with the working environment. In addition, related to the power of individual physicians in budgeting and in allocation of resources outside of the formal hospital management structure, there was concern that health professionals would use this power to allocate more money to costly equipment and technologies, thus leading to overall inefficiency in resource allocation.

Problems with Overall Hospital System Management

As Hong Kong's public hospital system continued to grow in both range and size, the current arrangement with the Medical and Health Department overseeing all aspects of this system appeared to have become inadequate. Although regionalization had

decentralized decision-making to a limited extent, most final decisions continued to rest with the Medical and Health Department, which being part of the government structure must necessarily deal with the usual layers of government bureaucracy in effecting major changes in the system. In many instances, the regionalization scheme had only served to create an additional layer of bureaucracy. In short, there was a general feeling that the existing public hospital system was too bureaucratic and inflexible to cope with current challenges.

iii. Recommendations

In order to address these areas of concern, the Scott Report made the following main recommendation:

> A statutory Hospital Authority is recommended, outside the Civil Service but largely funded by Government. It would report through its own Board, the chairman of which would be independent. Public Health would be handled by a separate body, within Government [31].

The Scott Report also recommended the proposed Hospital Authority to have the following characteristics:

> (i) that its board, separate from and yet accountable to and appointed by the Government, would represent not only the views of the Government, but also those of other interested parties such as the subvented hospitals, the community and professional groups;
>
> (ii) that it would employ staff of all public hospitals, including subvented hospitals, under common terms and conditions;
>
> (iii) that it would be supported by a strengthened medical policy function in the Health and Welfare Branch [32].

This main recommendation by the Scott Report, along with many of its other specific recommendations, was adopted by the Hong Kong Government after a period of Government study and public consultation. A major transformation in Hong Kong's public hospital system thus began.

III. THE NEW PUBLIC HOSPITAL SYSTEM

A. Establishment of the Hospital Authority

As an initial step toward the planning of the eventual Hospital Authority (HA), a Provisional Hospital Authority (PHA) was formally established on October 1, 1988 with members appointed by the Governor. After two years of planning, including visits to some 37 hospitals and meetings with hospital personnel, and a PHA delegation to Singapore, which was embarking on a health care system transformation of its own, the Hospital Authority was established by Government statutes (the Hospital Authority Ordinance) on December 1, 1990 to manage all public hospitals in Hong Kong. The Hospital Authority would be an organization independent of the civil service structure but accountable to the Government through the Secretary for Health and Welfare, which would monitor the Authority's performance. As of December 1999, the Hospital Authority managed a Head Office, 43 public hospitals with 28,602 hospital beds, 52 specialist outpatient clinics, over 50,000 full-time staff, and an annual recurrent expenditure budget of HK$2.8 billion. The hospitals were divided into eight regional clusters: Hong Kong East, Hong Kong West, Kowloon East, Kowloon West, Kowloon Central, New Territories East, New Territories South, and New Territories North. Each cluster centered around a large general acute regional hospital, supported by a number of hospitals and clinics for specialist in-patient and out-patient care, psychiatric care, long-term care and convalescent care. The duties and responsibilities of the Authority are governed by statute.

> The Authority is mainly responsible for delivering a comprehensive range of secondary and tertiary specialist care and medical rehabilitation through its network of health care facilities, at a price structure laid down by Government which guarantees almost free public medical service to ensure access to every citizen [43].

The Mission of the Hospital Authority is:

> (a) to meet the different needs of the **patients** for public hospital services, and to improve the hospital environment for the benefit of the patients;
>
> (b) to serve the **public** with care, dedication and efficiency, and to encourage community participation in the system, resulting in better care and more direct accountability to the public;
>
> (c) to provide rewarding, fair and challenging employment to all its **staff**, in an environment conducive to attracting, motivating and retaining well-qualified staff;
>
> (d) to advise the **Government** of the needs of the community for public hospital services and of the resources required to meet these needs, in order to provide adequate, efficient, effective and value for money public hospital services of the highest standards recognised internationally within the resources obtainable; and
>
> (e) to collaborate with **other agencies and bodies** in the health care and related fields both locally and overseas to provide the greatest benefits to the local community [39].

The words highlighted above as in the Hospital Authority Annual Report - patients, public, staff, Government, other agencies and bodies - reflect the Authority's intention to emphasize and balance the interests of all these entities in its development of the Hong Kong public hospital system. This Mission Statement, though general in its wording, also reflects the Authority's purpose to address inadequacies pointed out by the Scott Report in Hong Kong's public hospital system - poor hospital environment, dissatisfied patients, low morale among hospital staff, lack of community participation and accountability to the public, inefficiencies in hospital services amidst limited resources, etc. As will be discussed below, the Authority aims to fulfill its Mission and address the system's inadequacies principally through management transformations as suggested by the Scott Report.

B. STRUCTURE OF THE HOSPITAL AUTHORITY

The Hospital Authority is structured like a private corporation. The ultimate decision-making body is the Hospital Authority Board, whose members are all appointed by the Government. As of March 1997, the Board consisted of 24 members, appointed from the medical, nursing, hospital administration and allied health professions, the business sector, professionals, the universities, community and subvented organizations. It is recommended that the Chairman of the Board be not a member of the civil service, and that there be no more than three members of the civil service on the board [32]. As of March 1997, the three civil service members on the board are the Secretary for Treasury, the Deputy Secretary for Health & Welfare, and the Director of Health. Headed by the Chairman, the Board functions in a committee system. The Board works closely with the Hospital Authority Chief Executive (CE), who is himself a member of the Board. The Chief Executive, aided by 10 Deputy Directors (DD) as of December 1999, leads the Hospital Authority Head Office (HAHO), which implements the Board's policies and decisions. The HAHO assumes the role of purchaser of medical care, with the hospitals as providers. It formulates strategic plans for the entire public hospital system, coordinates medical resources and allocates resources to individual hospitals, and evaluates the performance of the public hospital system [43].

At the hospital level, each hospital now has its own Hospital Chief Executive (HCE) and Hospital Governing Committee (HGC). The Hospital Chief Executive is the overall manager of the hospital and has a high degree of authority over the control of staff and other resources within the hospital. He is a member of the Hospital Governing Committee and accountable to the HGC. He is also accountable to the Hospital Authority Head Office and reports to the Deputy Director of Operations. The hospital management structure is reorganized into five major divisions: Clinical Services, Central Nursing, Allied Health Services, Administration and Finance. A General Manager (GM)

accountable to the Hospital Chief Executive heads each division. This structure may vary slightly according to the size of the hospital. For smaller hospitals with a small number of clinical service departments, for instance, there may not be a General Manager for Clinical Services. The Hospital Chief Executive and the five General Managers make up the Hospital Management Committee, which represents the top management body within a hospital. The Hospital Chief Executive also acts as the Chairman of the Hospital Management Committee [44].

C. OBJECTIVES OF THE HOSPITAL AUTHORITY

Having briefly described the new management structures of the Hospital Authority and the individual hospitals, we now revisit the areas of concern as identified by the Scott Report to examine how these management changes were intended to address these areas of concern. The problems in the old public hospital system may be summarized as follows:

> 1. Lack of integration between government-assisted and government hospitals resulted in lack of accountability to Government, and in conflicts from discrepancies between compensations and benefits in government-assisted hospitals versus government-owned hospitals
>
> 2. An outdated structure for internal hospital organization resulted in ineffectiveness and inefficiency, in particular lack of responsibility and accountability for management of resources.
>
> 3. Overcrowding in hospitals
>
> 4. Dissatisfaction among hospital employees with working environment due to overcrowding, limited communication between workers and their superiors, lack of adequate support staff and limited promotional prospects
>
> 5. Increasing costs of hospital services coupled with limited government resources [31]

The creation of the Hospital Authority represents the Hong Kong Government's decision to address these areas of concern in the public hospital system largely by management transformations rather than by means such as changing the reimbursement or finance mechanisms. Therefore, the objectives of the Hospital Authority follow from its *raison-d'être* to address these areas of concern.

(i) To achieve a unified public hospital system with equal employment terms and conditions

One of the main objectives of the establishment of the Hospital Authority is to achieve a unified public hospital system by integrating government and government-

assisted hospitals under one common management structure. This new management structure has essentially eliminated the differences between the formerly government-owned and government-assisted hospitals. All staff are now employees of the Hospital Authority under the same terms and conditions. A common budgetary process would determine the annual allocation of resources to each hospital. Being a formerly government-assisted hospital no longer influences the level of funding. These changes should effectively eliminate the problems of lack of integration and conflicts from unequal employment terms (#1).

(ii) To improve effective and efficient use of resources through internal hospital reorganization

As described previously, the management structure of individual hospitals has been completely revamped. Most important, there is now clear leadership within each hospital, with the Hospital Chief Executive invested with the overall authority and accountability for the management of the hospital [32]. Some of his key powers and responsibilities are:

(i) To establish overall objectives, plans and policies of the hospital.

(ii) To direct the preparation of the hospital plan and budget, and submit to Hospital Authority Head Office for approval.

(iii) To establish personnel and human resources policies and oversee their implementation.

(iv) To recommend individuals to Hospital Authority Head Office for senior management positions.

(v) To direct the allocation of resources within the hospital through the planning and budgeting process.

Unlike his predecessor the Medical Superintendent, the Hospital Chief Executive is a prestigious post and holds real power. In particular, he has the power to promote, hire and fire. Moreover, by having the authority to direct the allocation of resources within

the hospital, the Hospital Chief Executive may better control the effective use of resources. With a clearly delineated line of management and accountability, powerful medical consultants should no longer hold the hospital leadership captive and render the effective management of resources within the hospital difficult. Thus, the new hospital management structure should effectively address the problem of ineffective and inefficient internal hospital organization (#2).

(iii) To relieve hospital overcrowding

Overcrowding has long been a problem in Hong Kong's public hospitals, especially in the major regional hospitals. One of the objectives in the 1974 White Paper was "to relieve overcrowding in Government hospitals" [31]. The regionalization scheme was introduced in part to better control patient flow and to relieve overcrowding in the major hospitals. New hospitals continued to be built. Nevertheless, by 1985, the overcrowding situation had persisted, with average occupancy rates of over 92% since 1980 (100% in 1982) in the regional hospitals. Hospitals often had to set up temporary camp beds to handle the extra patients. As a specific example, Queen Elizabeth Hospital, the regional hospital for the East Kowloon Region, experienced over 100% occupancy rates from 1981 to 1984, peaking at 112.5% in 1983; the numbers of average daily additional beds (camp beds) ranged from 46 in 1980 to 222 in 1983 [31]. In comparison to the regional hospitals, occupancy rates in the district hospitals were lower, averaging below 80% from 1980 to 1984. This suggested that more efficient allocations of patients within a region's hospitals might help to relieve overcrowding. Moreover, within individual regional hospitals, occupancy rates vary widely by specialty. For example, during the first three months of 1985 in Queen Elizabeth Hospital, the Oncology & Radiology (104.1%), Internal Medicine (123.3%) and Surgery (112.1%) wards all experienced over 100% bed occupancy rates and required camp beds [31]. In contrast, during the same time period, the Gynaecology (69.4%), Maternity (54.3%) and

Paediatrics (65.8%) wards all had occupancy rates below 70% [31]. This suggested that more efficient allocation of beds within individual hospitals might help to relieve overcrowding as well.

The Scott Report's recommendations to address overcrowding (#3) followed from its main recommendations for reforming the management structures of the overall public hospital system and of the individual hospitals. In theory, the integrated Hospital Authority structure should allow for more efficient allocation of patients within the public hospital system; and the clear lines of management and accountability within individual hospitals should enable more efficient allocation of hospital beds, human resources and other resources. The Scott Report also made several other recommendations regarding overcrowding, one of which was to perform more outpatient care where appropriate.

(iv) To improve staff satisfaction

By reducing overcrowding and instituting equal employment terms and conditions throughout the entire Hospital Authority, the new public hospital system should address much of the problem of dissatisfaction among hospital employees with the working environment (#4). Other sources of dissatisfaction included limited communication between workers and their superiors, lack of adequate support staff and limited promotional prospects. The problem of limited communication involves changing the structure and culture of management. The new hospital management structure described previously delineates clear lines of management accountability and works by a committee system. This new structure should help to promote communication among hospital staff. Furthermore, the Hospital Authority officially promotes a new management philosophy underlying the new hospital management structure. The elements of this philosophy include a multi-disciplinary team approach to patient-focused care and a participatory management culture [44]. Doctors, nurses, allied health workers and other support staff alike are encouraged to work together to achieve the best outcomes for their patients.

Through the committee system, hospital staff are encouraged to participate in the hospital's management. If implemented successfully, the new management structure and culture should promote communication among hospital staff. With regard to limited promotional prospects, the new Hospital Authority structure should address this problem as well. Equal employment terms and conditions should facilitate inter-hospital transfers. Opportunities for promotions to higher management positions within hospitals and in the Head Office are now available. The lack of adequate support staff is a manpower and workload issue. To address this, the Hospital Authority aims to reduce the patient-load of each medical consultant and of the nurses. It is unclear from the literature the exact means by which this would be accomplished. Another potential solution is to increase the use of non-professional staff to relieve the medical professionals of "mundane" tasks not requiring their professional expertise.

(v) To achieve quality hospital services with limited resources

In order to address the problem of increasing costs of hospital services coupled with limited government resources (#5), the Hospital Authority again counted on the expected increased efficiency in the use of resources resulting from the transformations in system and hospital structures. The Scott Report made recommendations regarding this problem under the assumption that the government funding scheme for hospital services in Hong Kong would remain essentially the same in the foreseeable future. Therefore, the system must somehow return a greater value of hospital services with the same amount of resources. This could only be accomplished through greater efficiencies. At the system level, a unified management structure should in theory improve allocative efficiencies in distributing resources to the individual hospitals. At the hospital level, whereas in the past the Medical and Health Department monitored and controlled all hospital finances from the center, more budgeting power is now decentralized to the Hospital Chief Executive and to the hospital committees [4]. Coupled with the expected increases in

efficiency from internal hospital reorganization as described previously, decentralization of budgeting power should produce greater efficiency in the use of resources at the hospital level. While the Scott Report made other recommendations regarding cost recovery, including raising the level of charges to patients, the Hospital Authority decided against most of these recommendations. The public hospital fee structure remains essentially the same. The Government heavily subsidizes all hospital services, with minimal charges to the patient. For example, in fiscal year 1992/93, although the average daily operating cost was approximately US$270 for in-patient services in the general ward, the patient was only charged US$6 per day[42]. In 1999, the charge was about US$9, which paid for room and board, imaging and lab tests, medicine, and any form of special treatment required including surgery, radiotherapy and physiotherapy. Moreover, all charges can be waived for patients who cannot afford to pay, on the recommendation of medical social workers [32].

One may see, therefore, that the Hong Kong Government intended to solve the problems in its public hospital system largely through management transformations in the form of the newly established Hospital Authority. It has been over eleven years since the establishment of the Hong Kong Hospital Authority. Let us evaluate the Hospital Authority's level of success/failure in meeting its objectives, using available evidence.

IV. AN APPRAISAL OF THE HOSPITAL AUTHORITY

The evaluation of an entire hospital system is a daunting, time-consuming and expensive task. It may be best done by combining both quantitative and qualitative evidence. With neither the resources, the time nor the authority to conduct a full-scale evaluation, this essay attempts to assess the Hospital Authority's level of success/failure in meeting its objectives by integrating original and available evidence, both quantitative and qualitative. Together these include staff satisfaction surveys, analysis of mass media views, participant observations and interviews with key informants, health statistics, health services statistics and financial statistics. Findings from staff satisfaction surveys conducted by others serve to illuminate the human resources issues. Analysis of mass media views serves as a proxy for the Hospital Authority's performance in the eyes of the public. Participant observations and interviews with key informants provide qualitative evidence, whereas the various statistics provide some quantitative indicators of the Hospital Authority's performance. By synthesizing findings from these various sources of evidence, this essay should provide a reasonably accurate assessment of the Hospital Authority's performance to date in meeting its objectives.

A. Staff satisfaction surveys

There have been three staff satisfaction surveys conducted on Hospital Authority staff since the establishment of the Hospital Authority. The first was an internal survey conducted by the Hospital Authority's Human Resources Division & Information Support Unit in 1992. The results from this survey were invalidated, however, because of concern over the need for numbering the questionnaires. It was believed that the numbering might adversely affect anonymity and influence the validity of the staff's response [35]. A similar but valid survey was carried out in 1993.

i. The 1993 Survey

The stated objectives of the 1993 survey were as follows:

> In this early stage of operation, HA management is keen to seek the views of staff and to gauge staff morale... It will also provide a benchmark for future measurement... [35]

Since there was no similar system-wide survey conducted prior to the establishment of the Hospital Authority on December 1990, the 1993 survey results serve as the best baseline data we have regarding staff satisfaction. This is also a reasonable baseline in light of the fact that changes did not happen overnight, and that the 1993 survey reflects staff opinions in the early stages of the ongoing transformations. Subsequent surveys would then allow us to gauge progress or the lack of which since 1993 regarding human resources issues.

The survey used a stratified random sampling method. The overall sampling frame was the staff list of the entire Hospital Authority. This overall sampling frame was divided into four main groups: administrative staff, medical staff, nursing staff and allied health staff. Within each group, the staff list for that group served as the sampling frame from which the sample was chosen by random sampling, stratified by grade (i.e. job function) and hospital.

The survey was separated into two exercises. Exercise 1 included statements regarding general feeling toward the Hospital Authority, communication, recreation, training and development, promotion and transfer, and appraisal; exercise 2 included statements regarding job satisfaction, immediate supervisors, and remuneration. The survey took the general form of asking the respondents to indicate their level of agreement with a statement using a 5-point scale (i.e. strongly agree, agree, neither agree nor disagree, disagree, strongly disagree). The survey was a mailed, anonymous and self-administered questionnaire. Where relevant to the purpose of this essay, the survey's results are taken verbatim from the report on The 1993 HA Staff Opinion Survey [35] and presented below.

Results of Administrative Staff Group

Encouraging Opinions

The majority of staff was happy to identify HA as their employer. More than half intended to work for the HA in the next three years. About two thirds of the staff believed that integrating government and subvented hospitals under one unified system would facilitate the delivery of better hospital services. A large majority recognized that a lot of changes were necessary for HA to succeed and they hoped to see more immediately observable improvements in hospital services. Despite the general feeling that communication needed improvement, more than half of the staff said that they received as much timely information as they required to do their job effectively. In general, staff was satisfied with their job. The majority found the nature of their work satisfactory. Half were happy with their job security. Most staff felt that they made a real contribution to the success of their department/section and also could see ways for improving the departmental effectiveness. They were satisfied with the working relationship with their colleagues. Staff had a high aspiration for training and development. Regarding their immediate supervisor, more than half of the staff was

happy with the supervision. They believed that their supervisors trusted them, maintained appropriate discipline, encouraged teamwork, were competent and willing to listen to ideas and opinions. About two thirds of the staff indicated their preference for a more flexible salary program which recognized individual merit performance.

Areas of Major Concern

Less than one third of the staff thought that things were getting better in HA and almost half were uncertain. Only 11% of those who were not on HA terms of employment planned to change to them in future. A majority felt that there had been too many changes as a result of the management transfer to HA. As regards concern for staff, less than a third said that management had considered their interest in making decisions. In terms of communication, about half of the staff did not think that there were enough channels to voice their grievances. Less than a third would express their views though staff consultative committees. Similar proportion said that explanation and background on changes in policies and procedures were inadequate. On job satisfaction, only about one third felt that their performance was recognized. They were not satisfied with the information they got from HA about the organization and they felt there were too many unnecessary regulations and procedures. Regarding training and development, almost half of the staff considered on the job training inadequate. They were not too optimistic about the opportunities and access to training provided and sponsored. About two third of the staff were concerned about the career advancement for their grade.

Other General Opinions

Half of the staff would like more job rotation. More than half preferred to use merit and experience as basis for promotion rather than seniority and qualification.

Results of Medical Staff Group

Encouraging Opinions

Reasonable stability was seen as the majority of staff intended to work in HA for the next three years and they were happy to identify HA as their employer. Three quarters of the staff believed that integrating government and subvented hospitals under one unified system would facilitate the delivery of better hospital services. A large majority agreed that lots of changes were necessary if HA was to be successful and they hoped to see more immediately observable improvement in hospital services. 61% of the staff was in general satisfied with their job. A large majority found their work nature satisfactory. It was encouraging to note that a large majority felt that they made a real contribution to the success of their department/section and also could see ways to improve the department effectiveness. Most staff was satisfied with the working relationship with their colleagues. More than half were happy with the authority or discretion entrusted to them, their job security and pay. An aspiration for training and development was high among staff. More than half of the staff was satisfied with the supervision they received. More positive views were expressed in their supervisors' technical/professional competencies, trust of them, maintenance of appropriate discipline, encouragement of teamwork, willingness to listen to ideas and opinions, setting good personal examples and high standards for staff, and giving timing and appropriate instruction and support. On remuneration issues, almost half preferred a more flexible salary program which recognized individual merit performance. More than half believed their pay was fair.

Areas of Major Concern

Less than a third of the staff thought that things were getting better in HA and even fewer staff felt that the establishment of HA would provide them with greater career opportunities. For those who were not on HA terms, about one third planned to change over. However, nearly half had not yet decided. The majority thought that there had been too many changes as a result of the management transfer to HA. Staff was not content

with the management's concern for them. Half of them disagreed that management had made decisions with due considerations of their interest. There seemed to be a need to improve management and staff communication. About a third of the staff often did not understand HA circulars and instructions. Half of them believed that there were not enough explanation and background on changes in policies and procedures. Less than 20% of the staff felt that the grievances channels were adequate. Regarding job satisfaction, more than half of the staff felt that there was too much work pressure and around one third were unhappy about workload. Staff was most concerned about the recognition they received for good performance. Only 20% odd felt that their performance was recognized. Half of the staff felt that there were too many unnecessary regulations and procedures. About 40% did not have enough information about the organization. On training and development, about one third of the staff felt that on the job training was insufficient, and that they did not have reasonable opportunities and access to training provided and sponsored. Almost half of the staff was negative about the career advancement for their grade and the transfer opportunities to other hospitals/departments. Staff were concerned that in the past promotion generally had not gone to the most deserved ones.

Other General Opinions

Staff would like more job rotation in the same grade. However, they were not keen in transferring out of their present hospital/department. More staff thought that promotion should be based on merit rather than seniority. Views on whether experience or qualifications should be a more important promotion criteria were divided.

Results of Nursing Group

Encouraging Opinions

The majority of staff was happy to identify HA as their employer and loyalty ran high as a similar proportion intended to work in HA for the next three years. About two thirds of the staff believed that integrating government and subvented hospitals under one unified system would facilitate the delivery of better hospital services. Staff realized that lots of changes were necessary if HA was to succeed and a large majority hoped to see more immediately observable improvements in hospital services. There was a general feeling that both-way communication needed improvement. The majority of staff was satisfied with the nature of work they did. An encouraging sign was that most staff felt they made a real contribution to their department's success and could also see ways of improving on this and the department's effectiveness. A similar number of staff was happy working with their current colleagues. As far as supervision was concerned, over half of the staff believed that their supervisor maintained appropriate discipline and encourages teamwork. With remuneration, staff would prefer a more flexible salary program recognizing individual merit performance.

Areas of Major Concern

Perhaps the biggest concern that had emerged from the survey was the opinions of the lower rank staff. Pupil and Student Nurses as well as Enrolled Nurses often expressed dissatisfaction throughout the survey but particularly so in the supervision section and the job satisfaction section. It appeared that the younger staff and those with the least length of service were most dissatisfied. This was an overriding issue throughout and was the most concerning factor of note. There were also a lot of neutral answers, suggesting staff were indifferent which in a sense was a negative issue also. Only a small number of staff felt that things were getting better in HA and only 12% of nurses not on HA terms of employment wished to change to them in the future. Also, the majority thought that there had been too many changes as a result of the management transfer to HA. As regards

concern for staff, less than a third of staff felt management made decisions after duly considering staff's interests and even fewer felt that the establishment of HA would provide them with greater career opportunities. With regard to communication, more than half of the staff did not think that there were enough channels to air their grievances and less than a third would use staff consultative committees to express their views. Looking at job satisfaction, staff was not happy about the amount of pressure there was in their job. Workload was one of the concerns. They were also not happy with the amount of discretion or authority they had. They felt strongly that they did not get enough recognition when they performed well, especially the lower rank staff. There was also concern about safety at work from about half of the respondents. In respect of training and development, nearly half of the staff were concerned that they did not receive sufficient on the job training to do their job well. In addition, a similar proportion did not have reasonable opportunities and access to training provided and sponsored by their employer. Two thirds of staff did not believe career advancement was good for their grade. 57% were concerned that in the past promotion had not gone to the most deserved. More than half would like to transfer out of their present hospital/HAHO Department. Regarding supervision, many respondents answered neutrally for the majority of the questions. Perhaps this in itself was an area of concern. However, questions which gained fewest positive responses and more negative responses included the issues that immediate supervisors did not have enough authority to make day to day decisions, work allocation was not always fair and ideas and opinions were not always listened to.

Other General Opinions

Nursing staff would like to see more job rotation and would also like promotion to be based more on experience than on qualifications. Staff was also generally happy with the supervision they received. However they felt there were too many regulations to follow and not enough information about the organization given.

Results of Allied Health Group

Encouraging Opinions

The majority of staff was happy to identify HA as their employer and loyalty ran high as 60% intended to work in HA for the next three years. About two thirds of the staff believed that integrating government and subvented hospitals under one unified system would facilitate the delivery of better hospital services. Staff realized that a lot of changes were necessary if HA was to be successful. The majority hoped to see more immediately observable improvement in hospital services. There was a general concern for better two-way communication. More than half of the staff had job satisfaction. The majority of staff was happy with the nature of work they did and the working relationship with their colleagues. It was encouraging to note that most staff felt that they contributed to the success of the department and could see ways for improving the effectiveness of their department. Although about one third of the staff gave neutral answers to most of the questions about their immediate supervisor, more positive responses than negative ones were recorded. In particular over half believed their supervisors maintained appropriate discipline, were competent technically/professionally, encouraged teamwork, trusted them and were willing to listen to ideas and opinions. Staff seemed to be receptive of a merit performance scheme. Almost half of them would prefer a more flexible salary program recognizing individual merit performance.

Areas of Major Concern

Only a small number of staff believed things were getting better in HA and only 12% of Allied Health staff not on HA terms of employment planned to change to them in the future. The majority thought that there had been too many changes as a result of the management transfer to HA. Only a quarter of the staff felt that HA management had made decisions after due consideration of staff interest. Staff was rather negative as to whether the establishment of HA would provide them with greater career opportunities. There was an urge for improvement in communication. Only about one third of the staff

understood HA circulars and instructions and a quarter felt that they were not given enough explanation and background on changes in policies and procedures. More than half did not think there were enough channels to air their grievances and less than a third would express their views through staff consultative committees. Regarding training and development, 41% of the staff said that they did not receive sufficient on the job training to do their job well. A similar percentage did not think there were reasonable opportunities and access to training provided and sponsored by their employer. Almost two third of the staff did not believe that career advancement was good for their grade. They were concerned that in the past promotion had not gone to the most deserved ones. With respect to job satisfaction, staff was most dissatisfied with the information they got from HA about the organization. Half felt that there was too much work pressure in their job. There was a great concern that their performance was not recognized. More than 40% thought that there were too many unnecessary regulations and procedures.

Other General Opinions

A majority of staff would like to have more job rotation in the same grade. More thought that merit and experience should be bases for promotion rather than seniority and qualifications.

ii. The 1995 Survey

Two Master of Business Administration students at the Chinese University of Hong Kong conducted the 1995 Hospital Authority Staff Opinion Survey on Human Resources Issues as their theses. In contrast to the 1993 internal survey, theirs was one of less ambitious scale. The overall sampling frame was the combined lists of medical and nursing staff at the ten biggest hospitals with the largest number of medical and nursing staff. These ten hospitals represented more than 70% of the total medical and nursing staff. The survey used a stratified random sampling method. A sample of 360 staff (110 doctors and 240 nurses) was obtained. The survey did not include administrative staff and allied health staff. A response rate of around 80% yielded an effective sample size of 291 staff members [20].

Though similar to the 1993 survey, the 1995 survey did not completely replicate the 1993 survey. Nevertheless, the students did explicitly state their intent to compare and contrast results of the 1995 survey to those of the 1993 survey [20]. There were a number of items in the 1995 survey either taken verbatim from the 1993 survey or similar enough in content to allow for comparisons. We would not be able to make comparisons for the administrative staff and allied health staff groups, however, because they were not included in the 1995 survey. Similar to the 1993 survey, the 1995 survey was a mailed, anonymous and self-administered questionnaire. We now highlight some of these comparisons below [20]. Where possible, the chi-square statistic is used to test for statistically significant differences and the p-value is reported. Statistical significance is defined as $p<0.05$.

Comparisons of Results for Medical Staff Group

Encouraging Comparisons

Almost half of the doctors agreed that the establishment of the Hospital Authority provided greater career opportunities in 1995, whereas less than a quarter agreed in 1993.

A majority of doctors were happy to tell people that they worked for HA in 1995 (about 70%), up from about 60% in 1993.

A significantly higher percentage of doctors in 1995 (90%) believed that their immediate supervisors trusted them (1993: 72%) ($p<0.01$). A significantly higher percentage of doctors in 1995 (86%) also believed that their immediate supervisors were willing to listen to their ideas and opinions (1993: 55%) ($p<0.01$). Eighty percent of doctors in 1995 agreed that their immediate supervisors allocated work fairly, up from 47% in 1993 ($p<0.01$). There was considerable improvement in medical staff satisfaction with their supervision in general in 1995 (about 85%), up from about 35% in 1993.

Close to 70% of doctors agreed that the packages offered by the Hospital Authority (i.e. pay, allowances and other benefits) were competitive in 1995, an improvement over 1993 (about 43%). Sixty-six percent of doctors in 1995 agreed that their pay was fair in relation to their job responsibilities, a significant improvement over 1993 (52%) ($p<0.05$).

A higher percentage of doctors was satisfied with their job in general in 1995 (81%), up from 61% in 1993 ($p<0.01$). A similar percentage of doctors in 1995 (57%) was satisfied with their workload (1993: 47%) ($p=0.16$).

More than half of the doctors agreed that career advancement was reasonably good for their grade in 1995, up from less than 20% in 1993. A higher percentage of doctors in 1995 (about 32%) agreed that there was reasonable opportunity for job transfer (1993: about 15%). A majority of doctors in 1995 (about 74%) continued to feel that they made a real contribution to the success of their department (1993: 85%).

More than 70% of the doctors in 1995 were satisfied with the amount of authority of discretion delegated to them to do their job, up from about 55% in 1993. About 60% of doctors in 1995 believed that they received recognition for doing a good job, up from about 25% in 1993.

Areas of Major Concern

More than half of the doctors disagreed that there were enough channels to air their grievances in 1995, a similar percentage to 1993. Although awareness of the Hospital Authority's mission statement remained high in 1995 (about 60%), it had dropped from 1993 (about 75%). About half of the doctors continued to feel that management had not given enough considerations to their interests in its decision making, same as in 1993. As in 1993 (42%), a low percentage of doctors in 1995 (31%) agreed that timely information could be obtained (p=0.11). Close to half (58%) agreed that they learned more from informal means in 1995, similar to in 1993 (48%) (p=0.16).

There was no significant improvement in satisfaction with the physical working environment in 1995 (about 51%), compared to in 1993 (about 45%). A significantly higher percentage of doctors found their work as not challenging in 1995 (19%), up from 8% in 1993 (p=0.02). On the other hand, as in 1993, close to half of the doctors also agreed that there was too much pressure in their job in 1995. A lower percentage of doctors in 1995 (about 58%) agreed that they received sufficient training to help them better cope with the changing requirements of hospital services (1993: about 85%).

Comparisons of Results for Nursing Group

Encouraging Comparisons

About 40% of the nurses agreed that the establishment of the Hospital Authority provided greater career opportunities in 1995, whereas only about 15% agreed in 1993. Awareness of the Hospital Authority's mission statement remained high in 1995 at about two thirds, same as in 1993. A lower percentage of nurses in 1995 (about 25%) felt that management had not given enough considerations to their interests in its decision making, down from about 40% in 1993. A majority of nurses were happy to tell people that they worked for HA in 1995 (about two thirds), similar to in 1993.

A significantly higher percentage of nurses in 1995 (69%) believed that their immediate supervisors trusted them (1993: 47%) ($p<0.01$). A significantly higher percentage of nurses in 1995 (62%) also believed that their immediate supervisors were willing to listen to their ideas and opinions (1993: 39%) ($p<0.01$). Sixty-one percent of nurses in 1995 agreed that their immediate supervisors allocated work fairly, up from 38% in 1993 ($p<0.01$). As in 1993, a majority of nurses were happy with the supervision they received in general in 1995 (about 60%).

More than half of the nurses agreed that the packages offered by the Hospital Authority (i.e. pay, allowances and other benefits) were competitive in 1995, an improvement over 1993 (about 29%). Fifty-four percent of nurses in 1995 agreed that their pay was fair in relation to their job responsibilities, a significant improvement over 1993 (38%) ($p=0.02$). Nevertheless, the percentage of nurses willing to work longer and harder for higher pay had increased from 34% in 1993 to 55% in 1995 ($p<0.01$)

A higher percentage of nurses was satisfied with their job in general in 1995 (69%), up from 47% in 1993 ($p<0.01$). A significantly higher percentage of nurses in 1995 (67%) was satisfied with their workload (1993: 39%) ($p<0.01$).

Close to half of the nurses agreed that career advancement was reasonably good for their grade in 1995, up from less than 10% in 1993. A higher percentage of nurses in 1995 (about 48%) agreed that there was reasonable opportunity for job transfer (1993: about 29%). A majority of nurses in 1995 (about 55%) continued to feel that they made a real contribution to the success of their department (1993: 61%).

Close to half of the nurses in 1995 were satisfied with the amount of authority of discretion delegated to them to do their job, up from less than 30% in 1993. About half of the nurses in 1995 believed that they received recognition for doing a good job, up from about 20% in 1993.

Areas of Major Concern

About half of the nurses disagreed that there were enough channels to air their grievances in 1995, a similar percentage to 1993. A significantly lower percentage of nurses (33%) agreed that timely information could be obtained in 1995, down from 62% in 1993 ($p<0.01$). Close to half (54%) agreed that they learned more from informal means in 1995, similar to in 1993 (45%) ($p=0.20$).

There was no significant improvement in satisfaction with the physical working environment in 1995 (about 45%), compared to in 1993 (about 41%). As in 1993, close to 60% of the nurses agreed that there was too much pressure in their job in 1995. A lower percentage of nurses in 1995 (about 37%) agreed that they received sufficient training to help them better cope with the changing requirements of hospital services (1993: about 73%).

iii. Discussion

Comparisons of staff satisfaction in 1995 to that in 1993 were generally positive. The Hospital Authority appeared to have made strides in achieving a unified public hospital system with equal employment terms and conditions. In comparison to 1993, more doctors and nurses in 1995 viewed the packages offered by the Hospital Authority (i.e. pay, allowances and other benefits) as competitive. For both doctors and nurses, there were also significant improvements from 1993 in their opinion of their salary as fair in relation to their job responsibilities. Moreover, the Hospital Authority had become a more attractive employer in general. In terms of career opportunities, career advancement and job mobility, the Hospital Authority received higher ratings in the 1995 survey for both doctors and nurses. As the Hospital Authority's employment terms and conditions became increasingly attractive, more doctors and nurses would continue to convert from their present terms to those of the Hospital Authority. All these improvements suggest

that the Hospital Authority has made progress toward achieving a unified public hospital system with equal employment terms and conditions.

Although there were several areas of concern, staff satisfaction in 1995 had improved overall from 1993 according to comparisons of the survey results. There were significant improvements in general job satisfaction for both doctors and nurses. Significant improvements are noted in several areas regarding staff supervision. In 1995, significantly higher percentages of both doctors and nurses than in 1993 believed that their immediate supervisors trusted them, were willing to listen to their opinions and ideas, and allocated work fairly. In terms of workload and the degree of autonomy given to staff in performing their job, both doctors and nurses displayed greater satisfaction in 1995. Staff morale remained high, as a majority of both doctors and nurses continued to feel that they made a real contribution to the success of their department in 1995 as in 1993. Moreover, in comparison to 1993, significantly higher percentages of both doctors and nurses in 1995 believed that they received recognition for doing a good job. For nurses, a lower percentage in 1995 felt that management had not given enough considerations to their interests in its decision making. Taken together, these positive comparisons suggested that the Hospital Authority had made progress toward improving staff satisfaction.

Not all comparisons regarding staff satisfaction were positive, however. The Hospital Authority needs to place greater emphasis on communication, for instance. More than half of the doctors and about half of the nurses in 1995, similar proportions to in 1993, continued to complain about the lack of channels to air their grievances. As in 1993, low percentages of doctors and nurses in 1995 felt that they could obtain timely information through formal channels to perform their job effectively. About half of both doctors and nurses expressed that they relied more on informal means to obtain such information. For nurses in particular, the problem of inefficient formal communication became significantly worse in 1995. About half of the doctors continued to feel that

management had not given enough considerations to their interests in its decision making, same as in 1993. With regards to the physical working environment, there was no significant improvement in satisfaction in 1995 for both doctors and nurses. Only about half of each group are satisfied with the physical working environment. According to comparisons of the survey results, satisfaction with the sufficiency of training to help staff better cope with the changing requirements of hospital services had declined significantly in 1995 from 1993 for both doctors and nurses. An increasing pace of change or a greater number of changes being implemented could account for this decline in satisfaction. There also appeared to have been no relief in job pressure in 1995, as close to half of the doctors and 60% of the nurses continued to find too much pressure in their job, similar to 1993. A somewhat contradictory finding showed that a significantly higher percentage of doctors found their work as not challenging in 1995.

While comparisons of the two surveys are helpful, we must be aware of a potential information bias in the 1995 survey. Since the 1995 survey included in its sample frame the staff lists of only the ten biggest public hospitals in terms of size, it might bias survey results toward greater satisfaction. Since the Hospital Authority might tend to focus its resources on the major hospitals, improvements in staff satisfaction might be greater in these major hospitals. In smaller hospitals with a smaller share of resources, staff satisfaction might be lower. These smaller hospitals, however, were not included in the sample frame of the 1995 survey.

B. Analysis of mass media views

Introduction

The power of mass media has been known to influence popular opinion in significant ways, one of which is in attitude formation and change [11]. As research findings accumulated, social scientists increasingly recognized the complexity of the relationship between mass media and popular opinion. The question became not whether mass media did indeed influence popular opinion, but how mass media influences on popular opinion were modulated by various factors. Some of these factors include characteristics of the source of the message (e.g. trustworthiness), characteristics of the message content (e.g. clarity of writing, emotional appeal of performance on television), characteristics of the channel (e.g. newspaper versus television), and characteristics of the audience (e.g. education, societal values) [10]. There also exist different models which describe the process by which mass media influence popular opinion. The Hypodermic Syringe Model sees mass media effects as simple and direct, similar to an injection into the veins of the audience, usually harmful but occasionally beneficial [11]. In this model, simple exposure to ideas from mass media would predispose the audience to follow such ideas. In the Two-Step Flow Model, ideas and attitudes flow "...*from* radio and print *to* opinion leaders and *from them* to the less active sections of the population" [11]. It is a more complex model in that it emphasizes "...personal *decisions* made by opinion leaders as a result of their greater *exposure* to the media than non-leaders" [11] and recognizes the complex relationship between exposure and decisions. The Uses and Gratifications model, on the other hand, emphasizes "...the selective way in which people make the media a part of their everyday lives and by so doing are able to satisfy a variety of social needs and desires" [11]. In contrast to the Hypodermic Syringe Model's emphasis on the power of mass media to direct popular opinion, the Uses and Gratifications Model

emphasizes the power of the audience to selectively accept messages from the mass media.

In order to assess the Hong Kong people's attitudes toward the Hospital Authority, a mass media analysis design was devised to replace the traditional survey design. By collecting and analyzing a large number of newspaper and magazines articles mentioning or relating to the Hong Kong Hospital Authority, general popular opinions toward the Hospital Authority may be assessed by proxy. This assessment operates under the model that exposure to ideas in the print media increases the likelihood of the readers adopting these ideas and that repeated exposure to such ideas reinforces the readers' belief in those ideas. For example, a reader is more likely to perceive inadequate access in Hong Kong's public hospital system when he reads a number of articles in the print media about overcrowding in public hospitals. This model differs from the simple Hypodermic Syringe Model in that it factors in the readers' previous beliefs, similar to the Uses and Gratifications Model. For instance, a reader who has personally experienced long waiting times in receiving ambulatory care in the public hospitals is more likely to resonate with reports in the print media about patient complaints of long waiting times. Repeated exposure serves to reinforce previous opinions or newly adopted opinions.

To minimize biases in this system of analysis, articles were collected from a wide spectrum of daily newspapers and weekly magazines over a span of three months. This diversity of perspectives and length of examination should help to minimize potential biases in the characteristics of the source of message and characteristics of the message content. This analysis focuses on the print media only because it lends itself easily to the system of analysis used here. Moreover, the print media represent an influential and vibrant media form among Hong Kong's highly literate population. In 1994, 89.2% of Hong Kong's population aged 15 or over have attained at least a primary level of education (equivalent to completion of sixth grade in the U.S.) [49]. Those who have

attained at least a secondary level of education (equivalent to completion of eleventh grade in the U.S.) represented 63.8% of Hong Kong's population aged 15 or over in 1994 [49]. The large number of local daily newspapers and weekly magazines supported by a large readership serves as evidence that Hong Kong's print media are indeed widely read and vibrant.

Methods

All articles mentioning or relating to the HK Hospital Authority were collected from 19 local HK daily newspapers and weekly magazines (*Oriental Daily News, Ta Kung Pao, Sing Tao Daily, Ming Pao Daily News, Express News, Apple Daily, HK Standard, HK Daily News, Sing Pao Daily News, Wei Wei Po, Tin Tin Daily News, New Evening Post, HK Economic Times, South China Morning Post, Ming Pao Weekly, The Next Magazine, East Week, HK Commercial Daily, Surprise Weekly*) over a span of three months from February 1997 to April 1997. The articles were read carefully and coded according to a scheme as shown in Table 4A. The numbers of articles pertaining to each category in the scheme were then tallied and recorded in Table 4B.

Table 4A Coding Scheme for Media Analysis

Affect

+ = favorable/positive; - = unfavorable/negative; ± = mixed; N = neutral

Content

S = System (e.g. rules, regulations, procedures, protocols, etc.)
M = Management (e.g. human resources, financial management, etc.)
A = Access (e.g. waiting times, availability, geography, outreach, etc.)
Q = Quality (e.g. technology, caring, health outcomes, training, service, etc.)
O = Other

Example

i. An article coded +Q, -A indicates that it contains favorable/positive remarks toward HA on quality issues but unfavorable/negative remarks toward HA on access issues.

ii. An article coded NO, +M, ±Q indicates that it contains neutral remarks toward HA on other issues not related to System, Management, Access or Quality, positive remarks toward HA on management issues, and mixed remarks toward HA on quality issues.

Table 4B Media Analysis Results

Month (1997)	System	Management	Access	Quality	Other	Total
Feb. (26/28)*	10+, 35-, 5±, 0N	4+, 27-, 4±, 0N	17+, 48-, 12±, 10N	98+, 31-, 18±, 21N	0+, 1-, 0±, 8N	129+, 142-, 39±, 39N
Mar. (23/31)	12+, 21-, 11±, 3N	29+, 11-, 7±, 10N	39+, 26-, 17±, 8N	91+, 46-, 14±, 3N	1+, 1-, 3±, 24N	172+, 105-, 52±, 48N
Apr. (23/30)	19+, 41-, 28±, 0N	10+, 43-, 8±, 0N	57+, 37-, 4±, 0N	96+, 41-, 9±, 2N	0+, 0-, 2±, 31N	182+, 162-, 51±, 33N
Total	41+, 97-, 44±, 3N	43+, 81-, 19±, 10N	113+, 111-, 33±, 18N	285+, 118-, 41±, 26N	1+, 2-, 5±, 63N	483+, 409-, 142±, 120N

*The ratio in parentheses indicates the number of days out of the total number of days in a particular month when articles were collected. For instance, in the month of February, all articles mentioning or relating to the HK Hospital Authority were collected from the 19 local HK daily newspapers and weekly magazines on 26 out of the 28 days.

Results

From February 1997 to April 1997, 185 articles were found in the Hong Kong print media pertaining to system issues in the Hong Kong Hospital Authority. Out of these 185 articles, 41 (22.2%) contained positive remarks toward the Hospital Authority on system issues, 97 (52.4%) contained negative remarks, 44 (23.8%) contained mixed remarks, and 3 (1.6%) contained neutral remarks. Out of 153 articles found to pertain to issues of management, 43 (28.1%) contained positive remarks toward the Hospital Authority on management issues, 81 (52.9%) contained negative remarks, 19 (12.4%) contained mixed remarks, and 10 (6.5%) contained neutral remarks. Out of 275 articles found to pertain to issues of access, 113 (41.1%) contained positive remarks toward the Hospital Authority on access issues, 111 (40.4%) contained negative remarks, 33 (12.0%) contained mixed remarks, and 18 (6.5%) contained neutral remarks. Out of 470 articles found to pertain to issues of quality, 285 (60.6%) contained positive remarks toward the Hospital Authority on quality issues, 118 (25.1%) contained negative remarks, 41 (8.7%) contained mixed remarks, and 26 (5.5%) contained neutral remarks. Out of 71 articles found to pertain to other issues, 1 (1.4%) contained positive remarks toward the Hospital Authority on other issues, 2 (2.8%) contained negative remarks, 5 (7.0%) contained mixed remarks, and 63 (88.7%) contained neutral remarks.

Discussion

Over 60% of the articles found to pertain to issues of quality in the Hospital Authority contained positive remarks toward the Hospital Authority on these quality issues. In general, these positive remarks focus on the caring demeanor of the hospital staff, the procurement of advanced medical technology, the medical competency and expertise of the physicians, and the availability of new services such as information hotlines and computerized medical information cards. Approximately one fourth of the articles contained negatives remarks regarding quality issues. These negative prints

reported patient complaints of bad treatment from hospital staff, episodes of alleged medical negligence leading to death and adverse health outcomes, and inadequacy in Hong Kong's mental health services. The much greater exposure to favorable reporting on the quality of Hong Kong's public hospital services, however, suggests that Hong Kong's general population is more likely to hold favorable opinions toward the Hospital Authority on issues of quality.

Regarding issues on access, there were approximately equal number of articles with positive (113; 41.4%) and negative remarks (111; 40.4%). The positive remarks focused mostly on the opening of new hospitals, the availability of new educational and outreach programs, and the procurement of a larger number of advanced equipment to serve more patients and to decrease waiting times. The negative remarks focused mostly on the overcrowding in psychiatric hospitals, abuses in emergency room usage leading to intolerable waiting times, and difficulties in scheduling appointments for certain specialties. Although the frequencies of exposure to positive versus negative remarks on issues of access in general appeared to be comparable among Hong Kong's populace, the concentrated reporting on excessive waiting times in emergency rooms and excessive waiting periods for scheduling medical appointments suggests that the general population likely holds negative opinions toward these aspects of access, even though overall the general population's opinions toward issues of access may be mixed.

On issues of system, about half of the articles contained negative remarks, while less than one fourth contained positive remarks. Both the positive and negative articles reported on a wide spectrum of issues related to rules, procedures, protocols and regulations. There was not a clear focus on specific topics. A considerable number of negative articles, however, reported on the lack of accountability of the Hospital Authority to the Government in an incident regarding the Hospital Authority's misuse of Government property, and on the overloaded system of emergency care, especially during the holidays. Since the Department of Health operated only a limited number of clinics

over the holidays, many patients with non-emergency cases would flood the emergency rooms of hospitals and cause intolerable overcrowding.

On issues of management, about half of the articles contained negative remarks, while about one fourth contained positive remarks. A number of positive articles were related to the hospitals' appropriate handling of patient complaints and the availability of training opportunities for hospital staff. The negative articles focused mostly on the heavy workload and pressure on hospital staff. Given the much greater exposure to unfavorable reporting on management issues related to Hong Kong's public hospital system, it appears that Hong Kong's general population is more likely to hold unfavorable opinions toward the Hospital Authority on issues of management.

C. PARTICIPANT OBSERVATIONS AND INTERVIEWS WITH KEY INFORMANTS

For a period of five weeks from 7/21/1997 to 8/23/1997 (and on a flexible basis prior to this period), I worked as an intern in the Management Division of the Hong Kong Hospital Authority. Mr. Wilfred Tsui, the Deputy Director of Management, was my supervisor. Under Mr. Tsui's supervision, I assisted the Management Division in various interventions related to Hong Kong's public hospital system. Specifically, my work included strategic planning, speech writing and workshop planning. I also had access to numerous meetings where, through observation and participation, I had the opportunity to gain an inside look at the operation of the Hospital Authority.

My first assignment was to draft a speech for the Chief Executive of the Hospital Authority, to be given at a plenary session of the 1997 Asian Healthcare Convention in Kuala Lumpur, Malaysia. It was a wonderful opportunity to understand the mission, vision and values of the Hong Kong Hospital Authority, given that it was necessary for me to understand all such elements before embarking on the writing of the speech. In fact, my preceptor intended my first assignment to be an initiating exercise into the organization. I undertook all my endeavors under his supervision, and consulted with him frequently.

My second assignment was to assist Mr. Tsui in designing a plan for the restructuring of the Neonatal Unit at Princess Margaret Hospital to improve the quality of patient care. Given my short period of involvement, however, I was unable to see this intervention to the end. Nevertheless, I was able to interact with the staff of the Neonatal Unit and to assist in the initial information gathering and strategic planning. My third assignment involves the planning of a workshop on the application of EQ (Emotional Intelligence) to health care management. Popularized by Professor Daniel Goleman of Harvard University in his recent book, emotional intelligence describes the realm of our abilities to empathize, understand and motivate ourselves and those around us. As

mentioned before, I also had the opportunity to attend numerous internal meetings, some of which were high-level. Through these assignments and interactions with various Hospital Authority staff, I was able to form my own assessments of the Hospital Authority's success in achieving its objectives.

Narrative

The Management Division serves as a driving force in the Hospital Authority's management transformations. It educates Hospital Authority staff on management matters and helps staff adjust to the many management changes taking place. As of August 1997, the division consisted of two deputy directors, one manager, and their support staff. The Executive Partner (EP) scheme supplied the remaining staff. The Executive Partner scheme allows interested staff at the hospital level to work at the Head Office level, typically for a period of six months to one year. Upon finishing their stint at the Head Office, the executive partner usually returns to work at the hospital level and assume a higher management position. The Executive Partner scheme is intended to serve two purposes. First, it develops personnel for management positions. Second, it helps to achieve a unified public hospital system by imbuing the executive partners with the mission, vision and values of the Hospital Authority, who would in turn disseminate these ideas onto the hospital level.

As one indicator of the success of the Executive Partner scheme, five executive partners had gone on to become Hospital Chief Executives during the scheme's five years of existence as of July 1997. My observations of and interactions with various executive partners also suggested to me that the scheme had indeed served its purposes. These observations and interactions took place in settings such as in the weekly Management Division meetings, in meetings to design the EQ workshop and the Hospital Authority Head Office review, an exercise intended to assess the performance of the Head Office, in general office situations and in social situations outside of the office. There existed in

general a high level of energy and enthusiasm for making the public hospital system in Hong Kong a better system. During the preparations for the Hospital Authority Head Office review, for instance, staff voluntarily extended meetings late into the night in order to accomplish the meetings' objectives. During our meeting to discuss the EQ workshop and to explore the application of emotional intelligence to health care, the language used by the staff indicated to me that they had attained an understanding of the many concepts emphasized in the Hospital Authority management philosophy, concepts such as continuous quality improvement, patient-centered care and multi-disciplinary teamwork. If these executive partners return to the hospital level with the same energy, enthusiasm and management knowledge, it bodes well for the ability of the Hospital Authority to achieve its missions and visions.

My experiences at the Hospital Authority convinced me of the effectiveness of the Executive Partner scheme, which was only one of many training programs intended to improve the management expertise of staff. Nevertheless, given the length of time necessary to change the management practices of a large organization like the Hospital Authority, it was not surprising that I also detected many problems in management, mostly at the hospital level. In my conversations with hospital level staff and executive partners who had recently worked at the hospital level, I learned that some hospital level staff perceived the many management transformations initiated by the Hospital Authority as an unnecessary burden hindering their work. Some hospital level staff, in particular the medical and nursing staff, felt that the establishment of the Hospital Authority had created a class of non-medical managers with little understanding of the actual delivery of medical care. As a result, extra demands on front-line medical personnel in the name of good management practice had impeded the actual delivery of medical care.

On July 31, 1997, I had the opportunity to observe an OBEM - Operations Branch Executive Meeting - for the New Territories North cluster, one of eight clusters into which the 44 public hospitals were divided for management purposes. The main purpose

of the meeting was to facilitate communications between the Head Office and the individual hospitals. Principal participants included the Hospital Authority Chief Executive and Deputy Directors from the Head Office, and Hospital Chief Executives from the five hospitals in the New Territories North Cluster. My main observation from this meeting was that members of the Head Office were showing frustration at times at the Hospital Chief Executives' lack of understanding of several processes. For instance, members from the Head Office spent considerable time explaining the annual hospital budgeting process to the Hospital Chief Executives, who had complained that the process was obstructing their freedom in human resources management. They complained that the process required them to project personnel needs a year ahead when such needs often change unexpectedly during the year, and that by budgeting and committing resources to a fixed number of personnel in each department, it limited flexibility in human resources management. In response, members from the Head Office had to explain in frustration that the annual budgeting process served only as a tool and a guide to help each hospital plan its use of resources, and that the hospital budget did not bind the hospital to hiring the exact number of personnel in each department as indicated on the budget. That the annual budgeting process had already been in place for several years likely contributed to the feelings of frustration among the Head Office staff when they saw that some Hospital Chief Executives still had not grasped the basic meanings of an annual budget.

On August 1, 1997, I attended a Hospital Chief Executives Round Table at Pamela Youde Nethersole Eastern Hospital. The round table was a regular monthly meeting intended to link together the Head Office and all 44 public hospitals. The Hospital Authority Chief Executive, all Deputy Directors and all Hospital Chief Executives were required to attend the round table. At least one deputy director was absent from the meeting, however, without an explanation at the time. One of the items on the agenda for the August meeting was an Hospital Chief Executive Experience Sharing session, where three Hospital Chief Executives each gave a fifteen minute

presentation on their hospital's experiences in achieving productivity gain. One Hospital Chief Executive framed the issue as how to follow the Hospital Authority's corporate direction to "do more with less and achieve better quality," with a capped government budget for hospital services and increasing demand. Some of the difficulties mentioned included staff reluctance to accept process change, and that staff often viewed the concept of productivity gain negatively because it would mean ultimately that they had to work harder than before. While it was a valuable occasion for everyone at the meeting to educate one another on concepts of management, it was also illuminating to note the tone of the presenters. I often sensed sarcasm in the presenters' delivery when they discussed the idea of achieving higher quality of services with less resources. I was apparently not the only one sensing this, as such sarcastic remarks elicited laughter from the participants several times. I sensed a certain degree of "going along with the party line" and saying what Head Office wanted to hear, without actually believing in what was said. This indicated to me that at this early stage in the establishment of the Hospital Authority, there existed doubts among staff, especially at the hospital level, that the management changes implemented by the Hospital Authority alone would solve the problems in Hong Kong's public hospital system.

One of my work assignments was to assist in the strategic planning of the Neonatal Unit of Princess Margaret Hospital, a general acute hospital for the New Territories South region. The Neonatal Unit consisted of eight to nine physicians, about forty nurses, and other personnel such as physiotherapists and dietitians. The Chief of the Neonatal Unit, Dr. Chow Chun-bong, was also a current member of the Hospital Authority Board. He was devoted to improving the quality of care in the unit and to putting into practice some of the new management concepts of the Hospital Authority such as patient-centered care, continuous quality improvement and multidisciplinary teamwork. He had conversed with Mr. Tsui, the Deputy Director of Management, and asked for his help in implementing these concepts within his own unit. As an opportunity

to intensify efforts toward this end, Mr. Tsui assigned me the task of laying the groundwork for strategic planning for the Neonatal Unit. I was to meet with Dr. Chow and members of his unit to understand the operation and dynamics of the unit. Through this mini-case study, I learned first hand how the Hospital Authority's new management concepts were being implemented at the hospital level.

It appeared that while the Hospital Authority's new management concepts were well publicized among the unit's staff, the staff remained baffled as to how to operationalize these concepts in the actual delivery of care. For example, the Hospital Authority's continuous quality improvement concept emphasized the importance of monitoring as a tool to identify areas for improvement. Many of the unit's staff, however, lacked the necessary background to conduct successful evaluative research. One dietitian expressed frustration at his inability to come up with a scheme to monitor his own work. Others expressed confusion and feelings that these concepts sounded good but were impractical. It appeared that Head Office had not given front-line staff at the hospital level adequate assistance in implementing its new management concepts. Some pointed to their already heavy workload, and viewed these new demands from management as distractions from their important clinical work. Some failed to see the relevance of evaluative research to their daily clinical work. Dr. Chow also felt that the young physician trainees were least interested in dealing with management concepts because during their training years, they tended to focus heavily on the technical aspects of medicine at the expense of the human and management aspects.

Discussion

My participant observations and interviews with key informants both at the Head Office level and at the hospital level suggested to me the Hospital Authority was divided along the same two levels. In general, there appeared to be conflicts and misunderstandings between personnel at the Head Office level and personnel at the

hospital level. Some hospital level personnel appeared to view the Head Office with resentment and suspicion, which arose from perceived increases in workload and stress from management demands imposed by the Head Office. Some hospital level personnel appeared to only pay lip service to the new management concepts generated from the Head Office without actually believing in their value. Others genuinely wished to implement these new management concepts, but lacked knowledge and direction to put them into practice. On the other hand, the Executive Partner scheme appeared to be an effective means of promoting management expertise among hospital level staff and integration of the Head Office with the hospitals.

D. FINANCIAL ANALYSIS

Increasing public health services expenditures

The Hong Kong Government's policy on public spending, health care included, may be characterized as fiscally conservative. A former Financial Secretary of Hong Kong used the term "positive non-interventionism" to describe this fiscally conservative public spending policy [4]. In essence, this term describes the Government's belief in the paramount importance of economic prosperity to Hong Kong, and that the best way to help promote this economic prosperity is to leave maximum resources in the hands of the private market. One of the implications of this policy is low taxation and therefore conservative public spending. As shown in Table 4D, the Hong Kong Government had consciously based its level of public spending in approximate proportion to the size of the GDP [4]. In the period from 1990-1996, Government spending hovered between 16.3% and 17.8% of Hong Kong's GDP (Table 4D). Estimates for 1997-1998 show that this figure may increase to 18.4% to 22.9%. Government health care spending, approximately 90% of which was allocated to the Hospital Authority with the remaining 10% allocated to the Department of Health, took up between 1.7% to 2.2% of Hong Kong's GDP in the period 1990-1996, the period since the establishment of the Hospital Authority (Table 4C). Estimates for 1997-1998 show that this figure may increase to 2.5%. As a proportion of total government spending, health care took up between 9.8% to 12.7% in the period 1990-1996 (Table 4C).

Although health care spending in Hong Kong had exhibited trends of slight increases both as a proportion of GDP and as a proportion of total government spending in the period 1990-1996, it had nevertheless been kept relatively in check. The peak of health care spending in 1995 might be explained by unusually high capital expenditures. When measured in actual dollar amounts, however, government health care spending in Hong Kong grew at an average annual rate of 10.5% in the period 1990-1996. This

should be a cause for concern because government health care spending in Hong Kong is so intimated tied to the performance of the economy. Economic growth had kept pace with growth in government health care spending in the period 1990-1996. Should the economy falter at any time, however, it may no longer keep pace with the expected growth in government health care spending. As a result, Government may need to curb health care expenditures and cut back on the provision of health care services. Under this scenario, the public hospital system may suffer the most because it derives its funding almost entirely from the Government and its expenditures make up approximately 90% of total government expenditures in health care.

The "Harvard Report"

In 1998, Hong Kong did experience economic downturn as its GDP shrank for the first time in more than a decade. As the financial sustainability of Hong Kong's public hospital system was increasingly called into question, the Hong Kong Health and Welfare Bureau commissioned the Harvard University Consultancy Team headed by Professor William Hsiao in November 1997 to review HK's current health care system, assess the capability of the present financing arrangements in meeting future needs, and recommend some viable reform options. The resulting "Harvard Report" [50] published in April 1999 questioned the long term financial sustainability of the current system and believed that health services spending as an increasing share of total government spending would reduce resources for other competing demands such as education, welfare, housing and infrastructural development.

> Given the budgetary policy (as enshrined in the Basic Law) of keeping the growth of total government expenditure, over time, in line with the growth of GDP under the current system, the increasing growth of public health expenditure will necessarily displace budget funds for other programs. [50]

Based on their findings, the Harvard Team proposed a number of options:

A. Status Quo

B. Cap the Government Budget on Health
C. Raise User Fees
D. Health Security Plan (HSP) and Savings Accounts for Long Term Care (MEDISAGE)
E. Competitive Integrated Health Care

The first three options are self-explanatory. Option D, in brief, consists of two separate components: "individual savings accounts to be used to purchase long-term care insurance upon retirement or disability (MEDISAGE); and compulsory enrollment in an insurance (HSP) that protects people against unexpected large medical expenses, such as hospitalization and specialist outpatient services for certain serious chronic diseases during and after their working lifetime"[50]. The HSP requires the employers and employees to jointly pay 1.5 to 2.0 percent of the employees' wages as premiums. A Health Security Fund, Inc. would be set up to negotiate with the health care providers for the establishment of standard payment rates, covering inpatient services and specialist outpatient services for certain chronic diseases. The public will still need to pay for the general outpatient services on their own [55]. As regards MEDISAGE, the employers and employees will jointly contribute one percent of the employees' wages to the employees' individual savings accounts. When the individual reaches the age of 65, funds from his/her savings accounts must be withdrawn and used to purchase a long term care insurance policy, providing the individual, where needed, with residential care and home care services. In both HSP and MEDISAGE, the Government will subsidize the lower-income groups and the unemployed for the payment of premiums and their contributions to the savings accounts [55].

Option E represents the Harvard Team's long term vision for Hong Kong's health care system. This Competitive Integrated Health Care System retains all the financing

features of Option D. In addition, this system envisages that the Hospital Authority will be organized into "12 to 18 regional Health Integrated Systems that can contract with private GPs and specialists (or physician groups) to provide a defined benefit package that will include preventive, primary, outpatient and hospital care. Similarly, private hospitals and physician groups can also form integrated systems to provide the defined benefit package" [50].

The Harvard Report, based on their findings, argued that Hong Kong should adopt Option D to ensure its health care system's financial sustainability, and that Option E should be adopted in the long term to alleviate the fragmented state of the current system. The Report found that there was a lack of coordination and cohesions among primary, inpatient and community medicine, and between the public and private sectors. This had resulted in duplication of services, waste of resources, and discontinuity of services [55].

The Harvard Report called for a drastic revamping of Hong Kong's entire health care system. The compulsory social insurance model advocated in the report would shift most of the health care costs from the government to the employers and the Hong Kong people. The government would continue to cover the costs for the unemployed and those with low income. Needless to say, a reform proposal on a scale such as this generated a great deal of healthy discussions and debates as well as controversies. Findings from the Report have been undergoing a period of public consultation. Thus far, it appeared that the Report's main proposal has been met with mainly resistance. While the Hong Kong Government appeared unlikely to adopt HSP and MEDISAGE in the near future, the Report's other proposals are being considered.

Analysis of HA Outputs and Inputs

Hong Kong's aging population, increased costs associated with the adoption of new technology and rising community expectations for quality health services all contribute to the trend of increasing public health services expenditures. In 1992-1998, the number of inpatient admissions to facilities under the HA increased at an average annual rate of 6.8%, while the Total Length of Stay (TLOS) increased at an average annual rate of 3.5% (Table 4E). A combination of factors, including an aging population (Fig. 1B) with an increasing life expectancy (Table 1C), total population growth, and the public's increasing preference of public hospitals over private hospitals given improvements in quality of care and the maintenance of low costs, may explain these upward trends in inpatient admissions and TLOS. While the cost per bed-day has increased at an average annual rate of 2.9% in the period 1992-1998, the cost per discharge patient has actually decreased at an average annual rate of 1.4% in the same period (Table 4E). This may be largely explained by a declining Average Length of Stay (ALOS) in days per discharge as the ALOS declined from 9.2 to 7.2 for general specialties in the period 1992-1997 and from 12.3 to 10.1 for all specialties [50]. Reasons for these trends are unclear given available data. Increasing cost per bed-day may be attributed to inflation, increasing inputs without corresponding gains in outputs, decline in efficiency, a more severely ill case mix, better quality of care, or more likely a combination of the above. The decline in ALOS may be attributed to increased efficiency, more day surgery, more treatment given on an outpatient basis, premature discharge (which may lead to higher readmission rates and medical complications

contributing to increased total admissions, TLOS and cost per bed-day), or more likely a combination of the above. More data are needed to support or refute these hypotheses.

With regard to HA inputs in the period 1993-1998, total hospital beds increased at an average annual rate of 3.7%, while total HA staff grew at an average annual rate of 5.2% with the greatest rate of growth occurring among management and administrative staff consistent with the Hospital Authority reforms (Table 4F). Physicians and allied health personnel increases in percentage terms outstripped total bed increases in the same period, while the increase in the number of nurses lags slightly behind total bed increases.

E. Conclusions

Having presented evidence from staff satisfaction surveys, analysis of mass media views, participant observations, interviews with key informants, and financial analysis, we now assess the Hospital Authority's performance to date in achieving its objectives.

(i) To achieve a unified public hospital system with equal employment terms and conditions

The establishment of the Hospital Authority has essentially eliminated the differences between formerly government-owned and government-assisted hospitals. Results from staff satisfaction surveys showed that the Hospital Authority appeared to have made strides in achieving a unified public hospital system with equal employment terms and conditions. The Hospital Authority has become a more attractive employer in general, with more competitive salary packages, better opportunities for career advancement and more fluid job mobility. As the Hospital Authority's employment terms and conditions became increasingly attractive, more hospital staff would continue to convert from their present terms to those of the Hospital Authority. All these improvements suggest that the Hospital Authority has made progress toward achieving a unified public hospital system with equal employment terms and conditions. Nevertheless, my participant observations and interviews with key informants suggested to me the Hospital Authority might be facing a new form of fragmentation between the Head Office and the hospitals. In general, there appeared to be conflicts and misunderstandings between personnel at the Head Office level and personnel at the hospital level. Some hospital level personnel appeared to view the Head Office with resentment and suspicion, which arose from perceived increases in workload and stress from management demands imposed by the Head Office. While the Hospital Authority might have achieved horizontal integration of its hospitals, it might face a new form of

vertical division between management personnel from the Head Office above and clinical personnel from the hospitals below.

(ii) To improve effective and efficient use of resources through internal hospital reorganization

Available evidence did not support the notion that internal hospital reorganization had improved effective and efficient use of resources. Improvement in effective and efficient use of resources depended on the ability of hospital staff to successfully implement the Hospital Authority's new management concepts. Evidence from participant observations and interviews with key informants, however, suggested that some hospital level personnel appeared to only pay lip service to the new management concepts generated from the Head Office without actually believing in their value. Others genuinely wished to implement these new management concepts, but lacked knowledge and direction to put them into practice. Results from staff satisfaction surveys pointed to staff dissatisfaction with inadequate communication, lack of timely information and insufficient training, all leading to their inability to perform their job effectively and to cope with the changing requirements of hospital services. While the Hospital Authority's new management concepts may in theory improve effective and efficient use of resources, these concepts did not appear to be implemented to a successful degree in practice.

As mentioned, although the decline in ALOS may be attributed to increased efficiency, other factors may also lead to this decline, such as more day surgery, more treatment given on an outpatient basis, premature discharge (which may lead to higher readmission rates and medical complications contributing to increased total admissions,

TLOS and cost per bed-day), or more likely a combination of the above. More data are needed to support or refute these hypotheses. Moreover, the increase in cost per bed day may suggest a decline in efficiency. Taken as a whole, available evidence did not suggest that internal hospital reorganization had improved effective and efficient use of resources.

(iii) To relieve hospital overcrowding

The Hospital Authority has made improvements in relieving overcrowding among the major hospitals. Whereas average occupancy rates were over 92% in the regional hospitals from 1980-1985 [31], average occupancy rates in the same regional hospitals were approximately 80% from 1994-1996 [38, 40]. Nevertheless, overcrowding in psychiatric hospitals persisted. Average occupancy rates in psychiatric hospitals were approximately 95% from 1994-1996 [38, 40]. The largest psychiatric hospital in Hong Kong, Castle Peak Hospital, averaged over 100% occupancy rates from 1994-1996 [38, 40]. The problem of overcrowding in psychiatric hospitals was corroborated by reports from the print media. Moreover, there were a considerable number of negative reports on issues of access from the print media. These included reports on intolerable waiting times in the emergency rooms, especially during the holidays, and excessive waiting periods for scheduling medical appointments. Therefore, although the Hospital Authority has made improvements in relieving overcrowding among the major hospitals, there remained significant problems in overcrowding, long waiting times in emergency room usage, and long waiting periods in scheduling medical appointments in general.

(iv) To improve staff satisfaction

Available evidence provided a mixed assessment of the Hospital Authority's performance to date in improving staff satisfaction. Results from staff satisfaction surveys were encouraging, although there were some areas of concern. Nevertheless, comparisons of the 1993 and 1995 surveys showed that staff satisfaction appeared to have

made improvements overall. One of the major concerns was that medical and nursing staff continued to find too much pressure in their job. This concern was corroborated by evidence from the print media, and from participant observations and interviews with key informants.

(v) To achieve quality hospital services with limited resources

Analysis of the mass media showed that a large majority of reports in the print media contained favorable remarks toward the Hospital Authority on issues of quality. This provided evidence that the Hospital Authority was providing quality services and that the Hong Kong populace likely perceives the Hospital Authority as a provider of quality services. Moreover, financial analysis showed that government spending on health care has remained fairly constant both as a proportion of total government spending and as a proportion of the GDP. Since approximately 90% of this spending was allocated to the Hospital Authority, it suggested that the Hospital Authority's level of spending has remained fairly constant both as a proportion of total government spending and as a proportion of the GDP as well. Therefore, these evidences suggested that the Hospital Authority was able to achieve quality hospital services with a fairly constant proportion of the overall Government budget. In terms of actual dollar amounts, however, there has been a steady increase in Hong Kong's total public health service expenditures, resulting likely from a combination of factors including its aging population, increased costs associated with the adoption of new technology, rising community expectations for quality health services, total population growth and increasing public preference for public sector health services. These upward pressures will continue and likely intensify in an environment of economic uncertainties. The recent economic downturn in Hong Kong already demonstrated that economic growth might quickly fall behind the growth in public health service expenditures, leading to its continual rise both as a share of total government spending and GDP.

V. SUGGESTIONS FOR FUTURE

Hong Kong's health services delivery system is peculiar in the sense that although Hong Kong may be viewed as the epitomy of a capitalist society in many ways, Hong Kong has since the 1950s provided a virtually free health care system to its residents. The public hospital system now provides almost 90% of the total hospital beds in Hong Kong. Private hospital care and private insurance exist only minimally. As Hong Kong experiences issues of an aging population and rapidly rising health care costs coupled with increased community expectations, similar to many developed nations, it remains to be seen whether Hong Kong can maintain its current system of virtually free medical care. The Hong Kong Hospital Authority was established in this context, very much with the intent to reengineer the existing public hospital system so that the system could cope with existing and future challenges and continue to support virtually free medical care.

The creation of the Hospital Authority represents the Hong Kong Government's decision to cope with the aforementioned challenges largely by management transformations rather than by means such as changing the reimbursement or finance mechanisms. This is a curious choice because it relies heavily on human factors. Although structure and process matter a great deal, management remains essentially a human activity. In order for the Hospital Authority to achieve its stated objectives and to solve some of the old system's problems, therefore, it depends heavily on the ability of the personnel involved to effectively work with one another and to carry out the concepts of management. It has been discussed in the literature that medical professionals often lack understanding of management concepts [8]. This fact may represent the potential underlying difficulty in the ability of the Hospital Authority to succeed in meeting its objectives.

Indeed, the assessment presented in this essay has found this to be the case. While the Hospital Authority appears to have met some of its objectives (i), it has not met (ii) or

only partially met some of its other objectives (iii, iv, v). Moreover, new problems have arisen from the creation of the Hospital Authority, namely the vertical division between management personnel from the Head Office above and clinical personnel from the hospitals below. There exist among some hospital staff resentment and suspicion toward the Head Office from perceived or real increases in workload and stress from management demands imposed by the Head Office. The creation of HA has also contributed to the further fragmentation of the public healthcare delivery structure by separating hospital care from primary care. In addition, in light of the intimate link between the present financing arrangements of the public healthcare delivery system and the vagaries of the economy, the system threatens to be unsustainable in its present form during economic downturns. Therefore, it appears that the present management transformations embodied in the creation of the Hospital Authority could not alone solve many of the problems in Hong Kong's public hospital system. This essay now proposes some suggestions to improve Hong Kong's public hospital system.

1. Create a super Health Authority to include primary care

Although it was a good idea to create a corporate entity accountable to the Government but operating independently from the Civil Service, as it enhanced flexibility in decision-making and freed the Hospital Authority from the constraints of government bureaucracy, it was not a good idea to separate primary care from secondary and tertiary care. Currently, the Department of Health manages most of the public out-patient clinics involved in the provision of primary care. The lack of coordination between the Hospital Authority and the Department of Health was apparent from reports in the print media about patient abuses of emergency rooms, especially during the holidays. Since the Department of Health operated only a small number of general clinics with limited hours on holidays, even patients with minor ailments or injuries were forced to utilize hospital emergency rooms, leading to inappropriate usage and increased waiting times. Moreover,

some patients with non-emergency cases would choose to go to hospital emergency rooms for ease of access and convenience, even when general out-patient clinics were available. Others simply did not know about the general out-patient clinics. In short, better coordination of services between the Hospital Authority and the Department of Health could have alleviated this situation.

Under the current separation of primary care from hospital care in Hong Kong's public health care system, and the apparent lack of coordination between the Hospital Authority and the Department of Health, there can be no efficient patient case management. Inefficient case management may lead to unnecessary referrals and ordering of tests, thus contributing to higher health care costs. Most important, it may lead to adverse health outcomes for the patients. Moreover, the current system emphasizes treatment over health promotion and disease prevention, as evidenced by an almost nine to one ratio of public spending on the Hospital Authority versus on the Department of Health. The public would be better served by a health care system which more effectively integrates treatment with health promotion and disease prevention activities, of which primary care represents a crucial component.

For these reasons, an expanded Hospital Authority to include management of all public general out-patient clinics and community health centers is proposed. It should be renamed the Health Authority to reflect its holistic approach to the delivery of health care services. While the Health Authority would focus on the delivery side of health care services, the Department of Health would continue its role in carrying out public health activities in communicable disease control, health education, epidemiological surveillance, sanitation and environmental protection. By enabling greater control of referral patterns and ordering of tests and procedures, this new arrangement should improve effective and efficient use of resources. Greater control of referral patterns may also reduce unnecessary referrals and thus reduce hospital overcrowding and waiting

periods for scheduling appointments. Finally, a holistic approach to health care should improve continuity and quality of care.

2. Strengthen public primary care

There currently exists an imbalance between primary care carried out in the public sector versus in the private sector. Private general practitioners, 95% of whom are fee-for-service solo practitioners, provide approximately 70% of all out-patient primary care consultations in Hong Kong [9]. In contrast, the Department of Health provides only roughly 15% of all such primary care consultations. The remaining 15% are provided mainly by other alternative private practitioners, of whom traditional Chinese medicine practitioners are the largest group [9]. It appears, therefore, that in order to achieve a seamless public health care system, the government must strengthen its role in the provision of primary care services. The Government should consider expanding the number of general public clinics and enhance cooperation with both western and alternative private practitioners. Only by strengthening its role in the provision of primary care services would the proposed Health Authority reap the maximum benefits from its holistic approach to health care.

3. Raise user fees

As stated in the Annual Report of Hong Kong 1962, "...the policy of Government is to provide, directly or indirectly, low cost or free medical and personal health services to that large section of the community which is unable to seek medical attention from other sources" [18]. In reference to health care costs in the private sector, it was estimated in the 1964 White Paper that "...unsubsidized general outpatient medical care is not economically feasible for 50 per cent of the population, and that for inpatient treatment this figure rises to a minimum of 80 per cent" [18]. A policy of government provision of virtually free health care to Hong Kong's entire populace began in the 1960's

and has continued to this day. Since that time, however, Hong Kong has transformed itself into a prosperous world-class economy. The general economic hardships in the 1960's have diminished to a large degree. Furthermore, an increasingly prosperous populace is expected to demand higher quality health care services. Rapidly increasing health care costs, coupled with rising community expectations, will stretch government health care resources to the limit.

Therefore, it is proposed that the Government reexamine its health care policy in light of the different social and economic conditions in Hong Kong today. For example, the Government may consider raising the level of charges to enable greater cost recovery, since a larger proportion of the Hong Kong population may afford a higher level of charges today. At the same time, however, one must not forget that Hong Kong's tremendous wealth has not been shared equally. Over 600,000, or 10% of its total population, live below the poverty line. The rich in Hong Kong make up only 10% of the population, yet they hold 42% of the territory's gross income. The 50% at the lower end shares only 19%. It is of paramount importance, therefore, that a safety net continues to be maintained. The current policy of allowing destitute persons to apply for free care through the Department of Social Welfare should remain. In addition, the Government may consider a means-tested program to allow low-income families to apply for a reduced level of charges. In essence, it is proposed that the Government consider adding a third tier of higher charges for those who can afford them. Besides helping to achieve greater cost recovery, increasing the level of charges would also help to modulate attendance in public health care services, thus potentially reducing overcrowding and waiting periods for receiving appointments.

4. Promote private insurance

The Government may also consider tax incentives for employers and individuals to encourage more employer-subsidized and privately purchased health insurance. A

recent survey indicates that currently around half of Hong Kong households possess some form of employer-subsidized health insurance [21]. The Harvard Report places this number at 21% of the population with employer-provided health benefits and 26% with privately-purchased health insurance in 1998, versus 16% and 3% respectively in 1991 [50]. The promotion of private insurance and the institution of a three-tier system of charges will narrow the financial differential between public and private health services and help to modulate usage, as public health services are becoming overutilized at the expense of private health services, especially with regard to hospital services. Not only may this arrangement shift some of the costs from the Government to the employers and to those who can afford health insurance and choose to do so, it may also help to relieve overcrowding, long waiting times and long waiting periods for medical appointments in the public sector by shifting some of the demand back to the private sector. This arrangement has the potential to modulate usage without adversely affecting quality of care, while at the same time offering patients more choices of health care services.

5. Develop a coherent health policy congruent with the values of Hong Kong society

Freedom of choice is important to the people of Hong Kong, as evidenced by their resistance toward the compulsory nature of the HSP and MEDISAGE proposals [23, 24, 26]. Many have argued that these proposals failed to take into account the culture and values of Hong Kong society, that the Hong Kong people might prefer to maintain the current parallel system of public/private health care and make incremental changes to it instead [23, 24, 26]. Others have pointed out that the Hong Kong people may be willing to pay more to support the current system, that recent survey research suggests that "the government would be largely supported by the public if it were to increase taxes to fund escalating demand, or to structure user-charges in accordance with income" [21]. Jack Chun argues that although Hong Kong's Basic Law specifies a principle of balanced Government budget, that Government spending shall remain in line within a certain

percentage of Hong Kong's GDP, it does not specify the manner in which this budget would be allocated [25]. In other words, he suggests that Hong Kong's social and economic policies, not the Basic Law, dictate how much the Government would be willing to spend on health, that as a society Hong Kong could very well decide to spend more on health and less on other areas such as education, housing and infrastructure development, for instance. Furthermore, in spite of the recent economic downturn, the Hong Kong Government remains in a strong fiscal position, increasing its fiscal reserves from HK$320 billion in 1997 to $444 billion in 2000, with most fiscal years posting a surplus. It is once again a matter of social and economic policies how this surplus may be spent, whether it be on health, other areas, or not at all.

The Government may also wish to reexamine its fundamental role in the provision of health care services in Hong Kong. That is, should the Government continue to provide coverage for all services or just coverage for all? In other words, in an environment of limited resources, the Government may be forced to focus on the coverage of services of great public health and social value and/or of high financial risk to individuals to maximize public health and protect individuals against catastrophic health expenses. As an example, the Government may decide to cease coverage for elective procedures such as cosmetic surgery and in-vitro fertilization.

In summary, the Government needs to reexamine its role in the provision of health care services and develop a health care policy that is congruent with the culture and values of the Hong Kong people.

6. Develop a long term strategy to achieve this health policy

Having developed this health policy, the Government needs to develop a long term strategy to implement this policy.

7. Incorporate the private healthcare delivery system into this overall policy and strategy

As alluded to previously, the private healthcare delivery system must be incorporated into this overall policy and strategy, especially since the majority of Hong Kong's primary care is provided in the private sector. Key to this incorporation, besides the promotion of more private health insurance, may be the development of patient record keeping regulations and better information technology infrastructure to enable the sharing of patient records with informed consent. This will improve quality and continuity of care, and reduce unnecessary duplication of services.

8. Expand efforts in health promotion and disease prevention

Government funding for health promotion and disease prevention stood at a paltry 4.2% of total government health expenditures in 1996/97 [50]. Given their potential to achieve a healthier population and thus fewer hospital admissions, health promotion and disease prevention endeavors ought to be more heavily emphasized and better funded.

9. Continue expansion of outpatient services

Moreover, Hong Kong's emphasis on a hospital based model of acute care and curative services is inappropriate for its aging population with more chronic illnesses. Hong Kong would be better served by an expansion of outpatient services better suited for health maintenance, health promotion and disease prevention.

10. Intensify efforts to educate the public on the organization of Hong Kong's public health care system

Patient abuses of emergency room usage illustrates the need for better educating the public on the organization of Hong Kong's health care system. The Government

should intensify efforts toward this end so as to minimize inappropriate usage of public health care facilities and to minimize wastage of valuable resources.

11. Conduct research on physicians' utilization and referral patterns

There appears to be a lack of research on Hong Kong physicians' utilization and referral patterns. The Government should intensify research toward this end to determine whether a peer utilization review board is necessary to reduce unnecessary or inappropriate referrals, admissions, and ordering of tests and procedures.

12. Expand psychiatric services

Ample evidence points to deficiencies in Hong Kong's delivery of mental health care. The situation appears serious and demands the Government's immediate attention.

13. Research the use of traditional Chinese medicine

Traditional Chinese medicine remains widely in use in Hong Kong today, as evidenced by its important role in the provision of primary care. Approximately 15% of all primary care out-patient consultations in Hong Kong are provided by alternative private practitioners, of whom traditional Chinese medicine practitioners are the largest group. Given Chinese medicine's important role in primary care, there should be greater research to understand the potential integration of Chinese medicine into Hong Kong's public health care system. Chinese medicine may also be more cost-effective in treating certain conditions. Research should be conducted to understand what these conditions are and how treatments by Chinese medicine may be better coordinated with treatments by western medicine.

Final Word

Hong Kong's public hospital system has performed remarkably with limited resources in the provision of high quality medical care to its population. Assessments in this essay, however, have found several weaknesses in this system. The recommendations above were made in light of these assessments. It is hoped that these recommendations would serve to effectively address these identified weaknesses.

Furthermore, it is hoped that in describing and analyzing the transformation of Hong Kong's public hospital system, this essay serves to enrich, however little, the body of literature on healthcare systems. Some lessons may be drawn from Hong Kong's experience, for instance, in our own nation's continual struggle against similar problems, namely how to achieve cost containment without adversely affecting quality and access. The urgency for change is perhaps even greater in our system where 15% of the population is uninsured and haphazardly cared for by a system of non-system.

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Fig. 1A Population, Hong Kong 2001

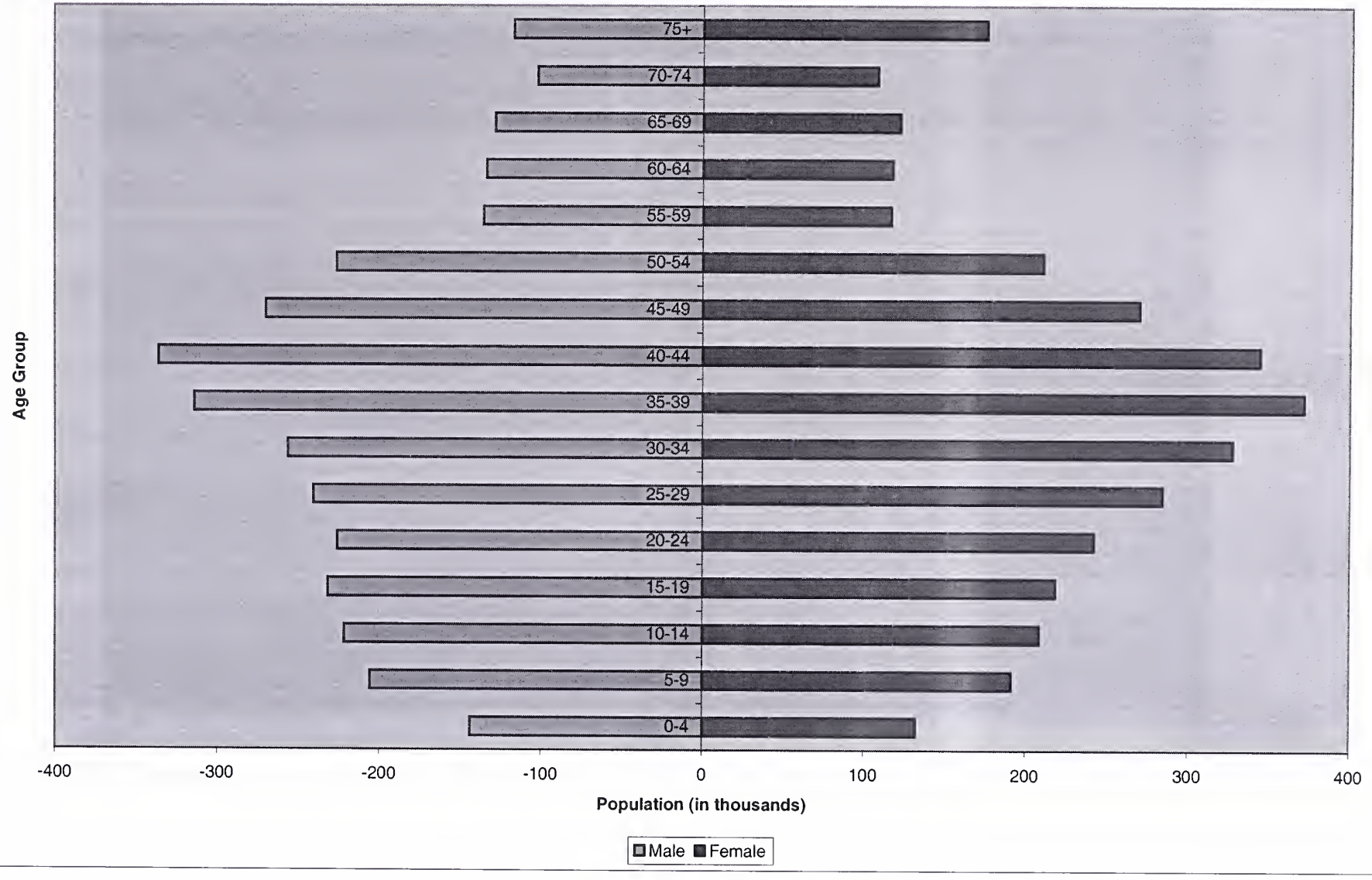

Fig. 1B Population Projection, Hong Kong

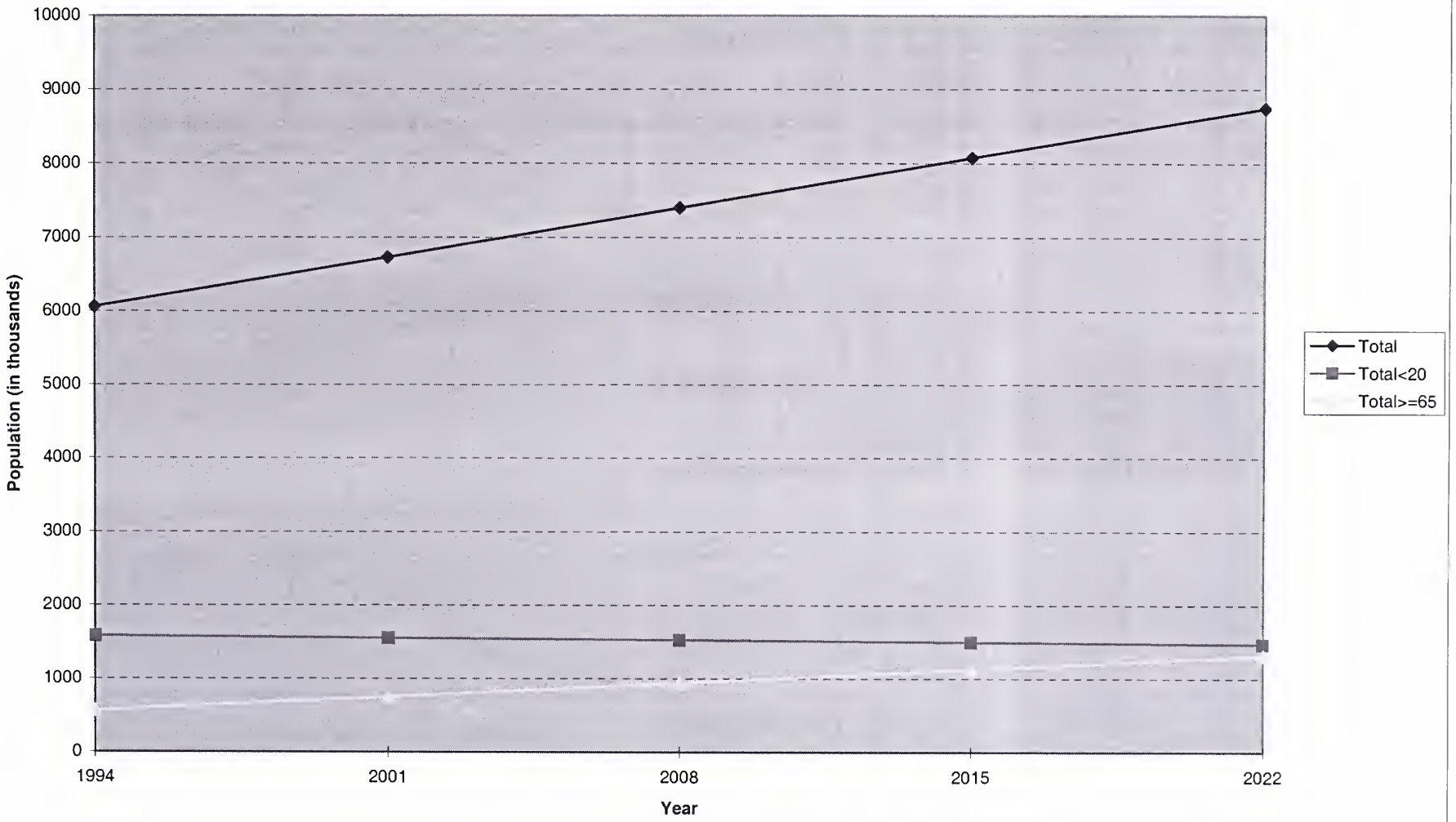

Table 1C Population & Vital Statistics for Hong Kong

	1989	1992	1995	1998	2000
Mid-year population	5,686,200	5,800,500	6,156,100	6,543,700	6,665,000
Crude birth rate	12.3	12.3	11.2	8.1	8.1
Crude death rate	5.1	5.3	5.1	5.0	5.1
Rate of natural increase	7.2	7.0	6.1	3.1	3.0
Infant mortality rate	7.4	4.8	4.6	3.2	2.9
Total fertility rate*	1,246	1,254	1,154	990	1,024
Expectation of life at birth					
Male	74.2	74.8	76.0	76.3	77.0
Female	80.0	80.7	81.5	81.7	82.2

Source: Census and Statistics Dept., Hong Kong

*Per 1,000 women aged 15-49

Table 1D Hong Kong's Top Five Killers

Standardized cause-specific death rates

Number of deaths per 100,000 population standardized using the world standard population published in World Health Statistics Annual 1996

	1989	1994	1999
Malignant neoplasms	135.21	124.84	114.22
Heart diseases, including hypertensive heart disease	72.54	60.56	48.21
Cerebrovascular disease	43.69	39.67	31.51
Pneumonia, all forms	30.42	24.80	26.21
Injury and poisoning	26.08	24.26	24.12

Source: Hospital Authority, Hong Kong

Table 1E International Comparisons of Selected Health Statistics in 1997

	Hong Kong	China	Japan	Singapore	Australia	New Zealand	Canada	U.S.A.	U.K.	Sweden
Expectation of Life at Birth (M)[1]	76.4	68.0	77.2	75.0	75.9	74.3	75.8	73.6	79.7	76.7
(F)[2]	82.0	71.0	83.8	79.2	81.5	79.6	81.4	79.4	74.6	81.8
IMR[3]	3.9	32.0	3.7	3.6	5.4	6.8	5.5	7.2	5.9	3.6
Health Expenditure as %GDP	4.9	3.6 (1993)	7.4	3.2[7]	8.3	7.6	9.3	13.6	6.7	8.5
Hospital Beds[4]	4.69	2.35	13.17	3.63	4.4	6.1	NA	4.00 (1996)	4.3	4.0
Doctors[5]	1.42	1.61	1.92 (1996)	1.58	2.39	2.2	NA	2.83	1.70	3.1
Nurses[6]	5.77	0.97	4.33 (1996)	4.59	10.72	7.8	NA	8.15 (1996)	4.68	10.2 (1995)

Source: [27] [52] [54]

1) In years
2) In years
3) Infant Mortality Rate, per 1000 live births
4) # Per 1000 population
5) # Per 1000 population
6) # Per 1000 population
7) Estimate only

Table 4C Government Expenditure in Health, Hong Kong, 1990-1998

	Gov't Expenditure in Health (million Hong Kong dollars)					
Year	Recurrent	Capital	Total	% growth	% total Gov't expenditures	% GDP
1980	---	---	---	---	6.9	1.4
1985	---	---	---	---	8.4	1.4
1990	7724	1563	9287	---	9.8	1.7
1991	9785	1379	11164	20.2	10.3	1.7
1992	12340	1297	13637	22.2	11.0	1.8
1993	14520	3937	18457	35.3	11.9	2.1
1994	17027	2295	19322	4.7	11.6	1.9
1995	19963	4322	24285	25.7	12.7	2.2
1996	22740	2311	25051	3.2	11.9	2.1
1997	---	---	28293	12.9	11.6*	2.1
1998	---	---	31489	11.2	10.9*	2.5

Source: [4] [38] [53]

*Estimates only, subject to revision

Table 4D GDP and Total Government Expenditures, Hong Kong, 1990-1998

Year	Total Gov't Expenditures (million HK$)	GDP (million HK$)	Total Gov't expenditures as % GDP
1980	---	---	20.9
1985	---	---	16.6
1990	95198	555856	17.1
1991	108422	641136	16.9
1992	123493	745407	16.6
1993	155207	897595	17.3
1994	165950	1016567	16.3
1995	191338	1077145	17.8
1996	211248	1191890	17.7
1997	243905*	1323862	18.4
1998	288890*	1261437	22.9

Source: [6] [38] [53]

*Estimates only, subject to revision

Table 4E Hong Kong Hospital Authority Outputs

	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	Overall Annual Growth
Cost per discharge inpatient	10042	9859	9602	9279	9481	---	---
growth rate (%)	---	-1.8	-2.6	-3.4	2.2	---	-1.4%
Cost per bed-day	1092	1112	1160	1182	1222	---	---
growth rate (%)	---	1.9	4.3	1.9	3.4	---	2.9%
# admissions inpatient	710081	761599	840885	919743	958452	985469	---
growth rate (%)	---	7.3	10.4	9.4	4.2	2.8	6.8%
TLOS[1]	6532025	6694138	6945610	7218575	7437442	7764699	---
growth rate (%)	---	2.5	3.8	3.9	3.0	4.4	3.5%

Source: [50]

1) TLOS = Total Length Of Stay = Total # inpatient admissions X ALOS (Average Length Of Stay)

Table 4F Hong Kong Hospital Authority Inputs

	1993	1994	1995	1996	1997	1998	Overall Annual Growth
Beds	22391	23296	24166	25117	25947	26790	---
growth rate (%)	---	4.0	3.7	3.9	3.3	3.2	3.7%
Physicians	2651	2828	3067	3262	3449	3581	---
growth rate (%)	---	6.7	8.5	6.4	5.7	3.8	6.2%
Nurses	16573	16935	17474	18638	18919	19614	---
growth rate (%)	---	2.2	3.2	6.7	1.5	3.7	3.4%
Allied Health	2882	3158	3627	3944	4153	4295	---
growth rate (%)	---	9.6	14.9	8.7	5.3	3.4	8.3%
Management/ Administrative	531	705	847	959	1008	1038	---
growth rate (%)	---	32.8	20.1	13.2	5.1	3.0	14.3%
Others	15882	17018	18294	19865	20273	21006	---
growth rate (%)	---	7.2	7.5	8.6	2.1	3.6	5.8%
Total HA staff	38519	40644	43309	46668	47802	49534	---
growth rate (%)	---	5.5	6.6	7.8	2.4	3.6	5.2%

Source: [50]

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